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ORGANIC EDUCATION

A MANUAL

*FOR TEACHERS IN PRIMARY AND
GRAMMAR GRADES*

BY

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PREFACE.

THE main purpose of this book is very simple. It is to make a plain, straightforward report of a plan of work that has been in operation experimentally for some years in one of the regular ward school buildings of a large city. But in presenting the report it has been deemed necessary to give the underlying principles or philosophy of the plan. This philosophical interpretation constitutes Part I. Theory thus seems to come before practice, but such is not really the case. Part I presents not the starting-point of the work,—for that, as will be explained, was purely practical,—but the meaning of the work after it had been carried far enough for its meaning to become explicit. In Part II will be found a detailed statement of the methods actually pursued and of the materials actually employed. It is hoped that both parts of the work will be of interest and profit to teachers in other schools.

Grateful acknowledgment for assistance in the preparation of this book is made to the teachers in the Detroit Normal Training School, whose unflagging loyalty and enthusiasm have alone made it possible to carry on the work outlined in the following pages.

DETROIT, MICHIGAN,
June, 1899.

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PART I.

THE THEORY OF ORGANIZATION.

“Education is not a preparation for life : it *is* life.” — JOHN DEWEY.

ORGANIC EDUCATION.



CHAPTER I.

THE GENESIS OF THE SYSTEM.

THE plan outlined in this book consists in general of the use of certain typical periods of civilization as material for the work of the various grades. These periods have been chosen as satisfying the natural instincts and interests of children at certain stages in their development, and seem to be consecutive in the lives of most children, as well as in the history of civilization. The periods used are the following:—

The Nomadic Period, represented by the North American Indian.

The Pastoral and Agricultural Periods, represented by the Early Aryan and the Persian.

The Greek Period.

The Roman Period.

The Germanic Period.

The Period of Feudalism and Chivalry.

The Renaissance Period.

The Puritan Period.

The study of the Puritans in America is followed by a study of American national development, in lines of political, industrial, and social progress, and then by a

similar, though less detailed, survey of the civilization of the other grand continental divisions of the world, and later of the world as a whole; this last general view of the progress of civilization in all lines forming the basis for a study of sociology in the seventh and eighth grades, with especial reference to the family and the state, as social institutions.¹

The foregoing rough sketch must inevitably have suggested to the well-informed reader the "culture-epoch" schools of Germany and America. With these, indeed, the plan outlined in this book has its closest affinities, differing from them, notwithstanding, in some very striking and fundamental particulars. So essential is a right understanding of these identities and differences, that it may be permitted to turn aside for a moment from the straight course to discuss the present status of the culture-epoch theory, and its relations to the ideas to be presented in the following pages.

It must, at the outset, be admitted that the conception of child-development as being a repetition in little of the history of civilization belongs to the class of poetic fancies rather than to that of scientific facts. It has been a theory of the idealists in literature, philosophy, and pedagogy. Goethe expressed it in the well-known passage from *Wilhelm Meister*:—

"To act upon the world outside of us, and to coöperate with our fellow-men, is the end and aim of all education. Each shares in the accumulated results of the activity of the world. Each lives his own life, but at the same time lives the life of the race, sharing the experience of all vicariously."

¹ More detailed statements of the work done under these general heads will be found in Part II.

Schiller assumed it as a working hypothesis when he said : —

“There are for the individual, as for the entire race, the three following successive stages of development — the physical, the æsthetic, and the moral.”

Kant asked the question : —

“May it not be possible that the education of the individual should imitate the development of mankind in general, through their various generations?”

And the greatest of his successors, Hegel, answered the question in the affirmative : —

“The culture of the race must be absorbed by the individual; *i.e.* the individual must traverse the stages of development traversed by the universal spirit. In every child there is the *potentiality* of becoming one with the universal mind. To develop this potentiality is the province of education.”

The same idea was more formally stated by Comte : —

“Individual education can be adequately estimated only according to its necessary conformity with the collective evolution of the race.”

Among the writers on the theory of education, Pestalozzi appears to have been the earliest to enunciate this view : —

“Every child has the right to the judicious development of his faculties. Education should concern itself not merely with what it is to impart, but should consider first the development of those faculties the child already possesses. This method is based on the principle that the individual shall be brought to knowledge by a road similar to that used by the race as a whole. Actual counting preceded the first arithmetic, and actual measurement of land the first Euclid.”

But it was soon taken up by a more systematic reasoner. "The same idea," says Rein, in his *Handbook of Pedagogy*,

"was pursued by Herbart, the real successor of Pestalozzi. In his letters and reports to von Steiger, in Berne, 1797-1800, we find the essays called, *Ideas toward a Pedagogical Curriculum for Higher Studies*, and the highly suggestive essay, *On the Æsthetic Representation of the World as the Chief Concern of Education*. From these, we deduce the definite elements for his curriculum, which was to be a development of Pestalozzi's idea as applied to the Gymnasium. It is in short this, — the development of culture is to be presented in an ascending scale to the growing pupil, as an ascent from the ancient to the modern; from the Greeks to the Romans, thence to the Middle Ages and modern times. He intends that this historical course shall be applied only to the historico-humanistic studies which develop the sympathy, not to the scientific studies which train the intellect.

"Among the pupils of Herbart the question of curriculum was farther worked out by Dissen, Thiersch, Kohlrausch, Brzoska, and above all by Ziller. Ziller followed Herbart in the following fundamental ideas: 1. For the child the growth of human culture is of the highest interest, in so far as it is presented and received in the light of moral judgment. That is, in the light of the evolution or ascent from the ancient to the modern. 2. Classic representations that are intelligible to the child should be made the basis for study. 3. Only great and connected materials or subjects arouse the sympathy with sufficient intensity to be used in the moulding of character. 'True moral energy is the result of great scenes and thoughts, presented not in fragments but as a unified whole.' (Herbart.) 4. The stages of the development of the youthful mind are to be carefully considered. The child must be given congenial and appropriate subjects from the history of culture."

Froebel must also be reckoned among those who make this assumption, as will be seen from the following passage: —

"I am always struck by the fact that in every part of organic nature, life and growth appear to be progressive development from lower to higher, that this development follows the same general law of development which the class as a whole had gone through. In dealing with a child, therefore, one must seek to develop the inborn original capacities by a regularly connected progress, taking for our guide the progress and development of the race as a whole. Education should lead man to develop his essence, his individuality, to be *himself*."

In recent years the biological analogy has gone far to strengthen this conception, adding to the names above cited those of Huxley and Spencer. The latter in his treatise on *Education* develops the doctrine of Comte as follows : —

"The education of the child must accord both in mode and arrangement with the education of mankind as considered historically; or in other words, the *genesis of knowledge in the individual must follow the same course as the genesis of knowledge in the race*. To M. Comte we believe society owes the enunciation of this doctrine—a doctrine which we may accept without committing ourselves to his theory of the genesis of knowledge, either in its causes or its order. In support of this doctrine two reasons may be assigned, either of them sufficient to establish it. One is deducible from the laws of hereditary transmission as considered in its wider consequences. For if it be true that men exhibit likeness to ancestry both in aspect and character—if it be true that certain mental manifestations, as insanity, will occur in successive members of the same family at the same age—if, passing from individual cases in which the traits of many dead ancestors mixing with those of a few living ones greatly obscure the law we turn to national types, and remark how the contrasts between them are persistent from age to age—if we remember that these respective types came from a common stock, and that hence the present marked differences between them must have arisen from the action of modifying circumstances upon successive generations who severally transmitted the accumulated effects to their descendants—if we find the differ-

ences to be now organic, so that the French child grows up to be a French man even when brought up among strangers, and if the general fact thus illustrated is true of the whole nature, intellect inclusive; then it follows that if there be an order in which the human race has mastered its various kinds of knowledge, there will arise in every child an aptitude to acquire these kinds of knowledge in the same order. So that even were the order intrinsically *indifferent*, it would facilitate education to lead the *individual* mind through the steps traversed by the *general* mind. But the order is *not* intrinsically indifferent; and hence the fundamental reason *why education should be a repetition of civilization in little*. It is alike provable that the historical sequence was, in its main lines, a necessary one; and that the *causes which determined it apply to the child as to the race*. Not to specify these causes in detail, it will suffice here to point out that as the mind of humanity placed in the midst of phenomena and striving to comprehend them, has, after endless comparisons, speculations, experiments, and theories, reached its present knowledge of each subject by a specific route; it may rationally be inferred that the relationship between mind and phenomena is such as to prevent this knowledge from being reached by any other route; and *that as each child's mind stands in this same relationship to phenomena, they can be accessible to it only through the same route*. Hence in deciding upon the right method of education, an inquiry into the method of civilization will help to guide us."

Notwithstanding, however, the confidence with which the doctrine is presented, it is to be noted that in all this distinguished company of believers, not one has vouchsafed more than intuitive, or, at most, analogical reasons for the faith that was in him.

The essentially poetic character of the theory is not, however, by any means conclusive against its validity, but rather may be held to establish a presupposition in its favor, since every demonstrated scientific certainty has at some time passed through this mythical or poetic

stage, on its way to the prosaic land of fact. As the "music of the spheres" was a conception necessarily antecedent to that of gravitation, and the "resurrection of the body" to that of the conservation of matter and energy, so it may be that the culture-epoch theory is the embryo of a scientific truth.

Its opponents, however, do well to insist that it is at this stage only an embryo, and a hypothetical one at that. Our German friends, Drs. Ziller and Rein, with their numerous and estimable constituency, have seemed to stray at this point, assuming the theory as demonstrated, and thereupon building their systems.¹ This position is undoubtedly open to severe criticism from the philosophical standpoint. It is a virtual begging of the whole question at issue.

But that the problem is capable of solution, and even that it will be resolved at some time not far distant, seems to be indicated by the prodigious interest in child-study which is now sweeping the world. This is the direction from which, if at all, comes our help. And it is as a contribution toward the solution of the problem on the practical side of child-study that the present work has been undertaken.

The point will bear further emphasis that the plan here presented is, so far, only a practical expedient for meeting certain observed conditions of child-life, its success or failure in meeting these conditions constituting the data for the theoretical conclusions drawn. Otherwise stated the genesis of the plan has been purely practical, the theory being an afterthought. The sys-

¹ See Rein, *Outlines of Pedagogics*, pp. 120, 121.

tematic study of individual child-life upon which the system is based, was undertaken, not at all for any speculative purpose, but merely in order that the normal instincts and interests of each child might be properly fed by the material and methods used in the school. Various experiments were made to this end, and when the material which seemed best adapted to the mental development of each grade was supplied to it, this material was found, taken as a whole, to exemplify the underlying idea of the culture-epoch theory. That is, specifically the fundamental instincts of the majority of the first-grade children upon entering a particular school were found to be a restless curiosity, a naïve sort of imaginativeness, and tendencies toward contrivance of a crude order; in short, such instincts as characterize the Nomadic Period in civilization. Stories about Hiawatha suggested themselves as answering the interest of these children, and were successfully used. In the second grade, the Greek myths were found to appeal most strongly to the pupils, as embodying their own instinctive attitude toward life; and after a while in another grade stories of chivalry were demanded by the children in response to the dawnings of chivalric impulse only half recognized by themselves. From such suggestions on the part of the children the entire system has little by little arisen, without any idea at the outset of its being a "system" at all. Every expansion, retraction, or modification of the work has been made at the initiative of the children, and the coherence, if the system may claim any, is the coherence of the naturally developing organism, rather than that of the artificial structure. It was, indeed, in the earlier stages of the

work, almost invariably true that the significance of an expansion or modification of the plan in detail would be evident to the teacher or principal only after it had been found necessary from the standpoint of the children, and thus adopted. For instance, the Indian and the Greek stories had expanded into a large view of the Indian and the Greek civilizations in response to the demands of the children for more and more details in connection with these stories, before it became quite apparent that this meant, in each case, a "culture-epoch" study. But even then the point was not assumed, but tested steadily, and is still being tested in the school, without any idea that the "culture-epoch" theory has been thereby established, and, it must be confessed, with far less desire to see it established than to devise more and more efficient means for widening and enriching the dawning interests of the child.

CHAPTER II.

FUNDAMENTAL PRINCIPLES.

WHEN the plan had unfolded itself sufficiently to manifest its family likeness to the "culture-epoch" system, it also disclosed some very striking divergencies from that system as applied by Ziller and his followers in the German school.¹ In the first place, the "culture epochs" used in the foreign schools confine themselves largely to German and biblical history, whereas any American system must of necessity accommodate itself to the breadth of our national inheritances, and to the non-sectarian principles of our schools. Con-

¹ A specimen of a school programme devised for the German common schools will be helpful in appreciating this important distinction. The following is by Ziller : —

First School Year : Folklore Stories, from Grimm.

Second School Year : Robinson Crusoe, by Defoe.

Third School Year : History of the Patriarchs ; Heroic Age of Germany, and Thuringian Nibelungen Myths.

Fourth School Year : Heroic Times of the Hebrews ; Moses and the Judges ; History of the German Kings.

Fifth School Year : The Davidic Kingdom, and the History of Germany from Barbarossa to Rudolph von Hapsburg.

Sixth School Year : The life of Jesus, and the Prophets ; History of the Reformation, and Frederick the Great.

Seventh School Year : History of the Apostles ; Secular History of Antiquity.

Eighth School Year : Final Repetition or Review of the Catechism ; History of the War for Freedom.

sequently the periods of development here used have been representative phases or stages in world-civilization, rather than epochs in the history of one or two chosen peoples; and the ethical element has become, from an extraneous addition, the core and essential spirit of the whole.

Part II, containing the Outlines for the work actually to be done in the school, will serve to indicate somewhat in detail the periods of development chosen, and the considerations which have led to their use in the grades to which they are assigned. These considerations are in general, as has been emphasized throughout, the normal instincts and interests of the children of the grade in question. It is perhaps sufficiently evident from this fact how elastic is conceived to be the "correspondence" between the period of development in the child and the "culture epoch" chosen: and how subservient any idea of such a correspondence must be held to the actual facts of individual child-life as observed and interpreted by the teacher.

The second great divergence of the plan here proposed from the German system is found in the essential differences between the organization and the concentration methods of using the material provided. The German schools carry on simultaneously several distinct lines of work; for instance, German and biblical history, nature study, drawing, language, arithmetic or number, establishing between them, in the teaching, some connection, either artificial or natural, for the sake of unity. The present method, on the other hand, starting from a certain period of race development, successively differentiates this period into all its various interrelated

activities, industrial, artistic, scientific, mathematical, political, social, religious, and then, by comparison with other periods, unifies it again into what seems to be its fundamental idea or central principle, which as such has always an ethical bearing. And these unified activities constitute, with their respective details, the subject-matter for the grade. The various branches of study are not correlated or coördinated or concentrated by artificial means, but all have sprung immediately from the same trunk. The work of unification has been done before ever the teacher laid hand upon it. Her function is only to disclose the natural and organic unity preëxisting in the material.

Every period studied may be said to branch into three great trunks, — nature, institutions, and art. "Nature" means both the physical conditions (recognized and used) of the period, and the current scientific conception; "institutions," the industrial, social, political, and religious features of the age; "art," the inventions, mechanical devices, architecture, sculpture, painting, literature, and music. This constitutes the material, which is treated in three ways: (1) by comparing it in detail with the corresponding features of other civilizations, and in particular with those of our own age; (2) by measuring and calculating various details by means of standards both of that time and of our own; (3) by expressing in various forms the different ways in which the civilization of the period manifested itself, as well as some of the corresponding ways in which our own civilization is embodied.

These different aspects of the material and the ways in which it is to be handled are discussed at length in

the introduction to the Outlines, Part II; but perhaps enough has been said here to indicate the purpose of using the material at all. To some practical teachers it may not have seemed a sufficient answer to say, as was said in the last chapter, that the child is "interested" in the material. Why not interest the child in material that may be more directly useful to him? Of course the crucial point here is the conception of "useful." What is useful to an individual, at any period in his development? There will hardly, at this stage in educational science, be any controversy over the answer: Whatever furthers his harmonious interaction with the social organism of which he is a member. And this harmonious interaction presupposes a knowledge of the social structure of the present such as may indeed be imperfectly gained by mere contact with the organism as it is to-day, but which is obtained far earlier, more economically, and more successfully by a careful adjustment of this contact to the child's capacities for interpreting it. This complex, multifarious, highly differentiated social organism is of necessity incomprehensible to the comparatively simple, homogeneous, half-awakened mind of the child. Some of its earlier, less complicated stages, however, he seems eager to grasp and assimilate — a new interest and a greater power of assimilation resulting from his mastery of the primitive phase. By continual comparison of each feature of the simpler structure, with the correspondent features of our modern society, he comes little by little to comprehend the latter, and that in a much more thoroughgoing sense, than can the average man who has no idea of how the present order of things has come

to be. This, then, is the whole object of the study of the past, — to know the present. It is a clear case of the longest way round as the shortest way home. The spontaneous interests of the child have simply given us a clew which we may follow with him into the heart of the labyrinth of modern society. Or, to change the figure, we have simply by this method built a bridge for him from his present interests to his future interests. Of what material the bridge chances to be made is really a minor question, so long as it be capable of carrying the child on his way, from interest to interest. This antithesis must not, however, induce us to forget that the two sets of interests are, after all, the same, one being only the broadening and deepening of the other. Keeping close to literal fact, it may be said that this method is the progressive organization of the child's interests. And this means nothing less than life itself. Education is the widest and deepest living possible at any given moment. Or it is the most highly developed interrelation of life — on the one hand the life of the individual, on the other that of the social organism. And the relations of organism to individual are, from the standpoint of the individual, his interests, physical, economic, social, artistic, religious. Hence it is plain why education, which is, in the universe-sense, life itself, may be, from the practical side, defined as the progressive organization of individual interests. If such definition be accepted, it becomes evident at once why it is impossible to determine what is useful for the child to learn, except as his interests shall first point toward it. They are the unfailing indicators of the path to be pursued. We speak unthinkingly of "creating an in-

terest" in a certain subject; but none of us ever does it. None of us ever can do it. The most we can do is to expand or enrich an already existent interest. And the education of to-day cheerfully makes Hobson's choice in full recognition of the fact that the following of nature enriches both teacher and pupil an hundred fold more even than the denial of nature has heretofore impoverished them.¹

¹ See Appendix B.

CHAPTER III.

THE ORGANIC CURRICULUM.

THE present status of popular thought upon matters educational is not altogether easy to define. In America for the most part we still retain our ancient conception of the public school system as somehow a thing in itself isolated, unique, understood in some vague way to "prepare for life," yet not, in any practical sense, responsible either to the individual child or to the social structure for its policy or its methods. Yet, in recent years, vigorous, though unorganized, revolt against this incoherent notion has raised the standard of individualism in education, declaring that here, as all-elsewhere, the individual does not exist for the institution, but contrariwise.

And thus, of late, the old institutional conception of education may be said to contend with the newer theory of individualism. But out of the clash of these two conflicting notions, an ideal seems now to be rising, truer than either—the ideal of social individualism. Such an ideal has very recently come to expression in the aphorism of Professor John Dewey of the University of Chicago: "Education is not preparation for life: it *is* life;" and in that of Colonel Francis W. Parker, of the Chicago Training School: "The common school is

the central means for preserving and perpetuating the true democracy.”¹

Such expressions as these recognize the fact that the individual is, indeed, the centre of every rational educational system, not however the individual as such, in the limited sense, but the whole individual in all his relations; that is, the social individual. They involve the philosophical conception of the individual as a specialized or focussed functioning of society, and, conversely, of society as the whole functioning of the individual. The individual is society acting in a certain direction. He is a focussed activity of the entire social organism, just as the eye is the whole body directed toward the end of seeing. Society for its part is the complete activity of each individual.

Such, then, being the essential interrelations of society and its individual members, it is idle to balance the one against the other as ends of education. The real advantage of society involves ultimately the advantage of the individual member of society. And, conversely, the real betterment of the individual must inevitably tend toward the betterment of society. The two are no more separable in practice than are faith and works, thought and feeling, capital and labor, or any of

¹ The thought has come to pervade the best of modern educational literature. See, for example, Commissioner Harris's report on the Correlation of Studies in the Report of the Committee of Fifteen: "The branches to be studied and the extent to which they are studied, will be determined mainly by the demands of one's civilization. These will prescribe what is most useful to make the individual acquainted with physical nature and with human nature so as to fit him as an individual to perform his duties in the several institutions—family, civil society, the State and the Church."

those delusive apparent dualisms whose unity is the life of each part.

With this point clearly in mind, that the latest word in education is social individualism, reconciling institutionalism on the one hand with private individualism on the other, we shall proceed to compare the old curriculum with the new. From the standpoint of the older systems themselves, it is evident that the plan presented in this volume would familiarize the pupil with all the specific subjects now presented to his attention under the established order. He would study reading, spelling, grammar and composition, arithmetic, natural science, United States history, civil government, writing, drawing, and vocal music under the one as under the other system. But the new plan further provides him with systematic instruction in the history of civilization, sociology, literature, art, and ethics, which subjects are at present only incidentally and fragmentarily, if at all, touched upon in primary and grammar grades.

To this extension of the common-school curriculum two objections may be anticipated: (1) that the course is already overcrowded with subjects, so that the days are too short for their tasks, and both teachers and pupils are burdened beyond their strength, and (2) that such subjects as are here added are beyond the comprehension of primary-school pupils. To the first objection no disclaimer can be entered. The statement is literally true. The curriculum is overcrowded. But the difficulty inheres rather in lack of organization than in the mere number of subjects studied. There is a limit to the number of disconnected facts an individual can

memorize. There is no limit to his grasp of organized, interrelated, and interdependent knowledge. In other words, while his stock of information may be finite, his knowing is infinite. And, thus, under a system of education whose methods both at large and in detail follow the ever-widening interests of the individual child in their natural development from a state of undifferentiated homogeneity to a more and more finely differentiated, and at the same time a more and more closely unified, organization,—under such a system, where the child is himself the leader, the rapidity of his mental development and the extent of his power of assimilation are fairly astonishing to teachers familiar only with the results of the old system. So far from being overcrowded, the children are perpetually a little in advance of the material provided. They feel the need of it before it is given. And, as a result, they are always mentally hungry. At times, indeed, this hunger seems keener than at others, but it never wholly abates, for it has never been choked up with undemanded material. Step by step their interest has gone before to guide the progress of the teaching, and every lesson, meeting this interest fairly, has contributed to widen and enrich it; so that, in the great majority of cases, it has gained, before school days are over, besides an enormous expansion and deepening, a certain capacity for conscious self-direction.

And, further upon this head, the overcrowding of the curriculum is greatly relieved by the continual use of every subject studied as a tool for further investigation. For instance: reading is no longer studied as an end in itself. The children spend no more time learning to

read, but simply read for the sake of the subject-matter. The case is the same with spelling, writing, and composition. The technique of these arts once learned enables the child to use them as the carpenter uses his lathe or plane. He, indeed, by using, continually learns to use them better; but the period of mere learning to use them with no other immediate end, is exceedingly short as compared with the time devoted to the bare technique of reading and grammar, for instance, in our common schools. Under the organic system, an arithmetical process, as long division, is not taught as such, but as a means for determining, say, the amount of material needed for the new house of some child in the room. And the results of such methods of teaching would seem to justify the general answer to the objection of overcrowding the curriculum, that children thus taught cover the same ground in less time than under the old system, and with greater thoroughness.

By the statement that the child learns with "greater thoroughness" under the organic system is meant that since what he learns is here not an extraneous something imposed upon him from without, but the natural development of his own interests, it is his own, it is really himself. He cannot forget or lay it aside when school-hours are over for the day, or when school-days are over for life; for it is in a real literal sense his own self. This means thoroughness as a vital, not a mechanical, quality in education.

One further result of the organic system which contributes in no small degree to the rapidity and thoroughness of the pupils' mental assimilation, should be noted here. The logical presentation of each subject and

each lesson may reasonably be expected so to habituate the children to coherent mental processes that the bearings of one fact upon another will be at once apparent to them. They would not then be compelled, in the study of any subject, to spend long hours groping blindly for some link of thought, vaguely felt, rather than perceived, to be missing; or to labor under chronic misconceptions due to perverted habits of thought. On the contrary, a subject would unfold itself to them in the first instance, logically proportioned and clearly articulated. They would thus be rendered capable of originating, as well as of following, a train of logical thought from beginning to end, moving from point to point with sure-footed ease. They would also be able often to detect and even to locate a fallacy in the reasoning of another, where many adults, whose logical instincts have been stultified rather than developed, are only dimly conscious of "a screw loose somewhere." The ethical bearings of such a capacity as this surely need not be elaborated. It may, however, be noted in passing, that without such capacity no rational self-determination of conduct is ever possible.

To return to the objections against the proposed extension of the school curriculum: as to the inability of children to comprehend the subjects of sociology, art, and ethics, it must be remembered that the child can grasp any subject whatever, if only it be unfolded to him in logical order in response to the demands of his own interest. This sole condition is satisfied by the organic system, so that if the ability of the child under this condition be admitted, the objection is met. No *a priori* argument, however, can be brought so convincing.

as the actual results of the teaching of these subjects by the organization method. The practicability of these subjects has been demonstrated to the entire satisfaction of experienced teachers at the outset incredulous. The children, it is true, do not know that they are studying art, ethics, and sociology, but they nevertheless are studying — or perhaps absorbing — these subjects from the first grade up, with a vital thoroughness such as no twenty weeks' course in college or university can possibly give. It is certainly fair to say that no college graduate, with but a year's or a half-year's "credit" in sociology, ethics, or art, is so saturated with the subject as is the child in the eighth grade, under the organic system. This is, of course, no discredit to the college or to the student. The case could not be otherwise. Appreciation of art and literature is not the product of a five months' gorging with the world's masterpieces. Nor do the text-book conclusions of ethics and sociology permeate the consciousness of the individual who is largely ignorant of the data from which they have been drawn, and who is justly satisfied with the philosophy which his experience has furnished him. Whatever may be true of other subjects, these three, at least, are a growth, or they are nothing.

Most of us are so well acquainted, either from observation or from experience, with the effects of the gorging process in one or all of these subjects, that this side of the contrast need not further be pursued. On the side of the slow assimilation plan, however, it may be said that while the results are not by any means startling, they are eminently sound and practical. The first crude artistic demands of the children are fed by equally crude

artistic material. They see and use the bright Indian colors and the grotesque Indian picture-writing. From this point their taste continually expands and refines, through the exuberant sensuousness of Persian coloring, the pure severity of Greek outline, the multifarious richness of mediæval and Renaissance painting, absorbing the spirit of each of these, and becoming truly cosmopolitan. The extent to which the lives of the children are thus enriched is all but incredible to those unacquainted with the facts. Most adults when brought into direct daily contact with the masterpieces of Greek art, for instance, are thereby to a degree edified. But that children surrounded from an early age by the forms of art which precisely answer the demands of their own interest in each stage of its development, -- that such children should not respond powerfully to such environment, would be more incredible than the fact. In truth, from grade to grade may be traced by the teacher the influence of the artistic environment of the child in the schoolroom. His dress, his manners, his moral character, his home, are all affected by it.

And the same facts are true as to the literature-teaching. The child's first instinctive desire for an expressive interpretation of the facts of life, in the beginning satisfied with animal stories and nature myths, grows with his growth until it demands a Goethe's, a Shakespeare's, and a Dante's masterpieces of poetic thought. And here also the ethical uplift is incontrovertible. This, however, has already been recognized far more universally than in the case of art, and many schools have discarded the "reader" pabulum for careful selections from the best literary material, both in

poetry and prose. But the point will nevertheless bear further emphasizing, until an acquaintance with the world's highest literature shall be popularly regarded as the right of public-school children.

The study of sociology need not surely be defended to any believer in the doctrine of social individualism. The relationship between the individual and the social organism cannot be wholly effective until it has come to self-consciousness — of which self-consciousness sociology is the scientific expression. The social development of the individual is not complete without a knowledge of the science of society, and under the hypothesis of social individualism, the social development of the individual is the end proposed to education.

By those of us who believe that the moral nature is not something separated from the body or intellect, but that it is the whole man, it might indeed have been anticipated, that the ethical results of the organic system should be pronounced in proportion to those termed "intellectual." The prime advantage which the ethical teaching under the organization plan may be said to have over others, is that, instead of imposing upon the children in a certain stage of development an ideal wholly extraneous to themselves, the fruit of a different period in civilization, the ideals naturally growing out of their own mental status are simply allowed full fruition in their conduct, that these may, in turn, give place to further ideals. The natural ethical development of the child is furthered — that is all — not thwarted by the stamping out of his own ideals, nor by the imposition upon him of ideals remote from and incomprehensible to him. By this means, the individual child gains

the invaluable habit of pursuing his ideals into the stage of conduct, reflecting upon that conduct, as its consequences return upon him, and thus modifying or reconstructing the old ideal in accordance with the new light. And it does not seem extravagant to say that if only this one habit were deposited from the tide of school life,—as it assuredly may be, under the organization plan,—the years of primary education would have been well spent; for it is this alone which renders possible a life at once morally free and morally responsible.

Some of the advantages afforded to the individual by the organization system have been discussed, its advantages to society being very largely implied in this. Let us, however, consider for a moment some changes which the new plan would of necessity bring about in the structure of the public-school system. Waiving details, it is evident that a degree of scholarship, practical efficiency, and enthusiasm hardly dreamed of before would be demanded of the teacher in the primary and intermediate grades. She must be at the outset, or must come to be in the course of her teaching, a wide and thorough student of psychology, ethics, sociology, economics, history, science, literature, and art. This at once sounds hopeless, but what the organization plan does for the pupil it also does for the teacher. Even the "average teacher," with fair capacity and some pluck, can do far better work with the organization system than under the old method. And as for the college graduate, to whom it seems that we are to look in the future for our teachers in secondary schools, such requirements should not lie beyond the scope of his

ability.¹ And to him they will prove attractive as no stultifying routine under the old system could possibly be. There will be no reluctance on the part of men and women adequately educated to assume the task of primary education under these generous conditions. The law of supply and demand will hold here as elsewhere. The kind of teachers wanted will be forthcoming. And the consequent advantage of wanting such teachers as are broadly educated is sufficiently obvious.

The transformation of the school under this system has been largely anticipated in the foregoing discussion. In general, it may be prophetically described as a treasure-house of the art, literature, science, and industry of the world, a laboratory of civilization, a busy cell or ganglion in the social system, a real segment of a real world.

For the particulars of the organic curriculum, the reader may be referred to the outline of study farther on in this work. At this point it will be sufficient to indicate in a general way the dominant interest for

¹ Professor Francis W. Kelsey, of the University of Michigan, in an article on "The Future of the High School," in the *Educational Review* for February, 1896, has this to say of the qualifications of the future teacher of the secondary school: —

"No one should now be encouraged to go into high-school teaching in any line without a range and quality of scholarship that may be fairly represented by the work for the master's degree; that is, the completion of the undergraduate course and a year of graduate work in an institution furnishing the best possible facilities. It will not be so very long before we shall see many positions in the larger high schools manned by those who have taken the doctor's degree."

If this prophecy as to the secondary schools be fulfilled, a corresponding rise may fairly be expected in the educational equipment of teachers for the primary and intermediate grades.

each grade, and the material which furnishes nutriment for the child at each stage of his development. These features may be exhibited in outline as follows: —

DOMINANT INTEREST.	MATERIAL.
To use senses (curiosity).	Nomadic period of history — Indian as type.
For possessions.	Pastoral and agricultural period — early Aryan as type.
For attention or notice.	Persian.
To imitate (suggestibility).	Greek.
To coöperate for sake of gain.	Roman.
For personal freedom.	Early German.
To serve (display power).	Feudalism and chivalry.
For adventure, experiment.	Renaissance — Columbus as type.
For what is true (incipient).	Puritan as type of reformation.
For activity, movement, affairs.	Story of America.
For the practical.	United States in its organic relations.
For what is personally practical.	Europe and its relations to the United States.
For authoritative knowledge.	Asia (past, present, future) in relation to the United States.
For explanation — how things came to be, or how they are done.	Africa, as showing nations crystallized (interpreted through their works), and as showing nations in the making. Its meaning to the United States.
For approval (extremes shown in diffidence and egotism).	The earth's history as a planet, its present physical conditions, and the evolution of industrial life. (Each individual, though but a small part, is seen to be organically related to the whole.)
For admiration and power.	Brief view of the history of the rise and decline of the great

DOMINANT INTEREST.	MATERIAL.
For a larger self, interest in community and national life.	civilizations of the world (with causes), and special study of social life. Growth of the State as a larger self, as shown in United States history, and of the individual as a larger self, as shown in literature.
For the ideal.	Ideals of institutional life (particularly of the home), as shown through history, nature study, literature, and art.

The material indicated above is, in use, divided into the large natural units suggested by the dominant interest, and the direction which is given to that interest by the environment. Thus curiosity may be manifested toward the whole environment, or it may be restricted to nature, to institutional life, or to art. The extent to which these units are elaborated will of course depend upon the stage of development of the children. Certain material obviously cannot be employed in particular cases until the insight of the child has grown adequate to it. For example, the evolution of institutional life from the germinal ideas is a conception that must wait upon the growth of the child's powers of abstraction.

The material is in each case presented through the subject in the ordinary curriculum that will best disclose its meaning and value. The central thought, for instance, would be developed in the language lesson, the physical setting would appear in the geography lesson, the nature and function of the environment would be shown in the nature-study, and so on throughout the entire round of school work.

CHAPTER IV.

THE SEQUENCE-METHOD.

It will be noticed that, in the outlines of work for the grade, reference is invariably made to a "story," as the form in which the material is presented. And this is, indeed, the typical, rather the invariable, mode of instruction employed. It may, however, be necessary to define further the word "story" as here used. By the term is meant the recital of a sequence, in organized unity, of events or circumstances. This sequence may be, and as a matter of fact usually is, a sequence in time. It may, however, be a sequence of place, of causation, or of development. The word "story" is useful chiefly as emphasizing the continuity or organization of the material, as conveying the idea of active progression rather than of static enumeration of details, and finally as suggesting the attractiveness which it is sought by every means to impart to the subject-matter presented. A story may, thus, be of Hiawatha's clothing, or of Kablu's home, of the life-history of the grasshopper, of the physical structure of North America, of the process of long division, or of electing a county commissioner of schools. It is not at all the subject-matter which constitutes the story, but the manner in which that subject-matter is presented. And the child, to say

nothing of humanity at large, finds the story so much more interesting than other forms of literature, embodying perhaps the same facts, mainly because the stream of his thought is nowhere interrupted by lack of connection, but flows smoothly on from point to point, following the plain path of a time-sequence. As his mind develops, he becomes better able to follow a thought-connection without the aid of the sequence in time. But the story, that is the organized, continuously inter-related body of ideas, always maintains with him its precedence over a chaotic heap of inconsequent facts. And hence the large use of the story form in this organic method, a use which has wholly justified itself in practical experience.

In telling a story, a definite plan is followed, which is familiarly known in the school as the "sequence-method."¹ The method in brief is as follows. The teacher, before telling any story, reduces it to its elements, cutting out every detail, down to the fleshless skeleton of essential points. These points are stated in sentential form, the subject remaining practically unchanged throughout, while the predicate follows the evolution of the central thought. For instance, the sequence for the life-history of the caterpillar would be something like this: —

¹ Several years ago there appeared in the *Review of Reviews* a series of articles upon the Gouin method of teaching languages. The reading of these articles suggested the idea which later, after much experimentation with pupils, developed into the sequence-method here presented. But while acknowledging great indebtedness to M. Gouin for the fundamental principle, I wish to absolve him from all responsibility for the details.

The caterpillar breathes.

The caterpillar eats.

The caterpillar grows.

The caterpillar crawls.

The caterpillar spins.

The caterpillar sleeps.

The butterfly wakes.

The butterfly flies.

The butterfly lays.

Or, for instance, note the following sequence for the story of how the Scotch blue-bell, by watching continually a patch of blue sky and one shining star, became blue in color, with a star in its cup which had not been there before.

The bluebell grew (where?).

The bluebell watched (what?).

The bluebell changed (how?).

From the explanation given thus far and from the examples just cited, it will be seen that the word "sequence" as it is employed in this book designates an organized body of thought-material. The elements of the sequence are so related that each part ministers to and makes more effective the other parts and the whole. The recital of a sequence means the presentation of the essential events, circumstances, or facts in a complete series of logically connected statements. The main characteristics of an effective sequence are five in number, namely: I. Completeness; II. Unity; III. Selection; IV. Proportion; V. Progressive Order. Each of these characteristics will be considered in turn.

I. *Completeness*. — A whole round of experience is pursued: (a) if a plant or animal, from seed to seed, or from egg to egg; (b) if an occupation, from the life-history of the raw material, to the completed product; (c) if a deed, from the motive or conditions, to the

result. The following is an example of a sequence taken from plant life:—

The apple-seed is planted.

The apple-seed swells.

The apple-seed sprouts.

The apple-tree grows.

The apple-tree blossoms.

The apple-tree bears.

For an illustration of a sequence drawn from human action, we may take the story of Golden Locks and the Bears.

Golden-Locks wandered.

She saw.

She entered.

She ate.

She broke.

She slept.

She escaped.

The pedagogical value of this characteristic of completeness is obvious. A complete sequence presents a subject as a whole. Thus, on the one hand, it satisfies the natural craving of the pupil's mind to know the whole of anything that is presented to it; and, on the other, it cultivates the habit of looking at things as wholes, not as fragments.

II. *Unity*.—A central thought or subject must be retained throughout the sequence. The experiences must be of one subject, no matter how many changes of form it may undergo. The unity of life under variety of forms must be preserved. Thus, in a sequence dealing with the life-history of the caterpillar the identity of animal life under the different forms of pupa and butterfly must be maintained throughout, as follows:—

The caterpillar breathes — eats — grows — crawls — spins — (as pupa) sleeps — (as butterfly or moth) wakes — flies — lays.

This characteristic of the sequence leads the pupil to dwell upon the oneness which underlies all the phe-

nomena of nature. The perception of this unity persisting in the midst of incessant change is the beginning of scientific knowledge.

• III. *Selection.*—The meaning or central idea of this cycle of experience is determined, and from the mass of events or circumstances only such are selected as seem of prime importance to maintaining this central idea or thread of the story unbroken. The advantage of this characteristic is that the pupil who uses the sequence forms the habit of grasping quickly the essentials of the subject, undistracted by the jostling throng of particulars. He thus attains eventually to clearer and profounder views of life and to a livelier sense of his own individual part in the work of the world. To illustrate this characteristic we may suppose that the teacher has before her the various particulars constituting Hiawatha's building of the canoe. From them she selects as most important the following:—

Hiawatha stripped (the bark for his canoe). .

Hiawatha shaped (the bows).

Hiawatha bound (the bark to the framework with fibre).

Hiawatha smeared (the seams with balsam).

Hiawatha decorated (the canoe with quills).

. IV. *Proportion.*—Any facts of secondary importance are reduced to sub-heads under the main points. Those of tertiary importance are omitted altogether.

The purpose of the teacher is defeated if the points are so presented that the mind fails to grasp the sequence as a whole. And such failure is likely to occur when points of minor importance appear to stand on an equality with those of prime importance. The use of sequences in which proportion is observed culti-

vates a sense for perspective. It reveals main, as distinguished from subordinate, values in the facts and acts of daily living, and thus helps the individual in the rational conduct of life. An illustration of this quality may be seen in the following sequence, designed for a study of the topic "Longfellow as a Writer."

Longfellow enjoyed.

- Appreciated the best because of influence of cultured parents.
- Observed nature with sympathy from attractiveness of his environment.

- Was interested in the industrial life around him.

- Loved the sea and ships, and learned much about them from the location of his native place.

Longfellow studied.

- Attended Portland schools.

- Continued his studies at Bowdoin College.

- Prepared for the bar.

Longfellow travelled.

- Visited Spain, France, Germany, and Italy.

- Prepared to teach modern languages.

Longfellow taught.

- Began at Bowdoin College.

- Continued at Harvard.

- Lived in Craigie House.

- Loved and showed consideration for his own and other children.

- Enjoyed distinguished friends.

- Gained the respect of his townspeople.

Longfellow wrote.

- Wrote poems about other lands and people.

- Wrote poems about our own lands and people.

- Wrote poems about and for children.

- Wrote poems about life and its meaning.¹

¹ It should be borne in mind that the progress of the sequence is to present material appropriate to children. A sequence for critical study would naturally assume another form.

V. *Progressive Order.* — The primary points are presented in the order in which the central idea, previously determined, unfolds itself. This order may be that of time, of place, of cause to effect, of means to end, of whole to parts, of outer to inner, of ideal to reality, of motive to result, or in fact any logical progression, whatever. The following examples exhibit different types of progressive order: —

THE PILGRIMS AS A FACTOR IN AMERICAN CIVILIZATION
(Cause and Effect).

The Pilgrims suffered (persecution because of religion).

The Pilgrims moved (to Holland, to escape persecution, and secure freedom).

The Pilgrims decided (to seek a home in America to prevent their children from acquiring Dutch customs).

The Pilgrims agreed (to abide by conditions of the compact to avoid friction in government).

The Pilgrims established (an element of permanency in our government).

THE ENGINE AS A MEANS OF LOCOMOTION (Means and End).

The fire heats the water.

The water produces steam.

The steam pushes the wheel.

The wheel moves the car.

THE STORY OF THE PIED PIPER (Time).

The Pied Piper appeared (in order to give counsel).

The Pied Piper declared (his ability to rid them of rats).

The Pied Piper asked (for the chance to do so).

The Pied Piper secured (permission).

The Pied Piper blew (on his pipe).

The Pied Piper succeeded (in ridding them of rats).

The Pied Piper asked (for his pay).

The Pied Piper threatened (to be revenged).

The Pied Piper played (on his pipe).

The Pied Piper drew (the children after him).

The Pied Piper taught (the people a lesson).

THE ROMAN BASILICA (Place).

You approach by a portico.

You enter a main hall divided by rows of pillars.

You reach the judgment seat.

You observe the apse back of the judgment seat.

VISION OF SIR LAUNFAL (Comparison and Contrast),

Sir Launfal was inspired (on going forth, by the season of returning vitality).

But was chilled (on returning, by the winter).

He decided (to go on a noble mission).

But returned unsuccessful.

He possessed ("the grandest hall in the North Countree").

But found another enjoying his possessions.

He started out elegantly equipped, young, and strong.

But came back on foot, clothed in rags.

He thought he must search without for the Holy Grail.

But learned that the quest was for something within himself.

The prominence of the verb in the foregoing sequences as an indicator of progression is in line with the fundamental principle of the system, which is activity, movement, life. For this reason the active form of the verb is used in the sequence whenever life, character, or conduct is involved. But when Nature is represented as passive, that is, as supplying material for man to shape in accordance with his own ideals, or as coöperating with man through her adaptation to his needs, this passive or adaptive quality is indicated by the use of the passive voice. Thus the life-history of wool in its service to man may be traced in a sequence as follows:—

Wool is cut.

Wool is cleaned.

Wool is combed.

Wool is rolled.

Wool is spun.

Wool is woven.

In stories involving character and conduct it is often desirable to indicate the conditions under which action was performed, to show what was received by the actor, or denied to him; for in this way the obstacles to progress which form the background of the deed are given due prominence. These things when brought into the sequence will naturally appear most often in the passive voice. They are, however, subordinate to actions in which character is manifested through the actor's own volition, and this subordination should be made to appear in the sequence. The following, dealing with the life of Pestalozzi, intended for more advanced study, will illustrate this point: —

Pestalozzi studied.

He was influenced by home training.

He was influenced by religious training.

Pestalozzi joined the league.

He was swayed by unpractical education.

He was impressed by the writings of Rousseau.

Pestalozzi prepared to champion the peasantry.

He was moved by the oppression of the peasants.

Pestalozzi established a poor-school.

His project was defeated by bad management, lack of foresight,
and excess of love.

Pestalozzi wrote.

He was suffering from debt.

He was discouraged.

Pestalozzi taught.

He was opposed by the director.

He was annoyed by the parents.

The sequences given thus far have dealt mainly with man's actions as they appear when viewed from the outside. We may, however, penetrate beneath the surface,

and from his thoughts, his feelings, his interests, and his motives, try to determine the springs of his activity. And these inner thoughts and feelings may constitute the material of the sequence. Thus we may take as an example of a thought-sequence Darwin's discovery of the law of natural selection: —

Darwin OBSERVED the fossil animals of South America and closely allied forms elsewhere; the different forms on different islands of the same group.

Darwin REFLECTED that neither the action of the surrounding conditions nor the will of the organisms could account for adaptation to habits of life of the organism; that it was futile to endeavor to prove by indirect evidence that species had been modified.

Darwin BETHOUGHT HIM that he might follow the example of Lyle in geology; that he might collect facts bearing upon the variation of plants and animals under domestication.

Darwin REASONED from Baconian principles, and from suggestions gathered by conversation, inquiry, and reading.

Darwin DECIDED that selection was the secret of man's success with plants and animals.

Darwin QUESTIONED how selection applied to nature.

Darwin DISCOVERED that favorable variations were preserved and unfavorable variations were not; that the result was a new species.

Darwin CONCLUDED that modified offspring of all dominant and increasing forms of life tend to become adapted to many and highly diversified places in the economy of nature.

The following account of the evolution of Jean Valjean's character (condensed from Victor Hugo's *Les Misérables*) illustrates the sequence based upon the successive states of feeling of the chief actor. The prominent verbs are italicized: —

resented	Jean Valjean <i>resented</i> the severity of his sentence.
hardened	He <i>hardened</i> during the long years in the galleys. He
melted	<i>melted</i> under the Bishop's kindness and his return of
aspired	good for evil. He <i>aspired</i> to be like the Bishop. He
pitied	<i>pitied</i> the suffering people. He <i>loved</i> the people, and
loved	the old peasant whom he saved from the galleys by
rejoiced	revealing himself, and Cosette. He <i>rejoiced</i> in that
feared	Cosette was not beautiful. He <i>feared</i> Javert, the
forgave	gendarme, who pursued him relentlessly. He <i>for-</i>
envied	<i>gave</i> Javert, and saved his life. He <i>envied</i> Marius
hated	Cosette's love. He <i>hated</i> Marius. He <i>desired</i> Cosette's
desired	happiness more than his own, and so <i>contented</i> him-
contented	self with that, by risking his own life to save Marius,
	and by bestowing his fortune upon Cosette at her
longed	marriage. He <i>longed</i> for some return of his love for
suffered	her. He <i>suffered</i> under their coldness and neglect.
blessed	He <i>blessed</i> them when Marius (after finding out Jean
	Valjean's real worth, and that it was he who had
	carried him through the sewers on the day of the
	barricade) brought Cosette to him just in time for
	his benediction.

In practice the use of the sequence produces remarkable results. These results, however, are no more than might naturally be expected. The fundamental tendency of all minds is toward self-realization. Whatever hinders this tendency brings about friction and pain. Whatever furthers it brings about healthful activity and pleasure. If through any agency the stream of thought is caused to move smoothly from point to point there results a sense of life, power, freedom. It is the office of the sequence to accomplish this end. By its help the pupil passes readily from point to point with the focus of consciousness unchanged, relating easily and economically the new with the old, the remote with the present. Such concentration of energy means clearness.

of imagery, and clearness of imagery means quick and powerful motor reaction.

In the use of the sequence-method the child gradually learns to look at phenomena as a whole, not remaining content with a fragmentary view; that is, he gains a continually broadening and deepening sense of unity. He comes to recognize almost intuitively the essentials in a subject, however obscured by subordinate details, and so to relate details to essentials as to fulfil the demands of logical proportion. He can build up a whole narrative in coherent form from the nucleus sequence, and by its aid think while standing before the listening school more clearly than the average adult seated in his library. These are not only possibilities but facts which have been realized in the use of this method.

CHAPTER V.

SPECIAL APPLICATIONS OF THE SEQUENCE-METHOD.

THE application of the sequence-method to language work has been suggested in the foregoing statements. The sequences given above as illustrations may be termed basal sequences. Each serves as the basis or logical framework for a story both as narrated by the teacher, and afterward as reproduced by the children. To the end that it may be thus useful, the teacher carefully observes the order of points in her own narration, and then draws the story from the children by such questions as: "What does the caterpillar do first? What next? What next?" until the logical progress of events is firmly fixed in their minds, the order being seen as one of necessity and not as arbitrary. The story may then be told as a whole by the children, the order of points in the sequence being always expected by the teacher. This does not at all mean that the story is told in the same language by each of the children. As a matter of fact, it never is, for, while the sequence is the skeleton of the story, it is not the living tissue. This the children fill out according to their own ideas, being required simply to maintain its proper relations to the framework.

The child tells a story before he ever thinks of writ-

ing it, and thus, while the subject-matter is still plastic in his hands, learns to differentiate details from essentials, to hold the thread of thought firmly in hand, and to follow it in continuous progress from its logical beginning to its logical conclusion. And when he comes to write the story which he has many times told and many more times heard told after this same fashion, it flows from his pen in the accustomed logical, well-articulated form, with scarcely an effort on his part. Writing is no bugbear to children who have been taught by means of the sequence, for they have their material well in hand, —always the onus of literary composition. And, further, through continued use of the sequence-method, the children gain such habitual clearness and coherence of thought that any subject met in their general reading is immediately reduced to its elements and logically reorganized as if by instinct. Such habits of mind, it need hardly be said, will go far toward transforming the perfunctory and marrowless study of "Composition and Rhetoric" in our schools into the vital joy of expression which it is sometime to be. If this method is followed, the stories used in connection with every subject may be reproduced both orally and in writing, so that the language work is an integral part of all the other studies. The formal side, that is, paragraphing, sentence-structure, use of words, generalizations as to the use of the different parts of speech, and other like technical points, is treated together with the thought-side. That is, the technique of communication flows directly from the thought. Technical points are taught, not for their own sakes, but as a means to more effective expression and communication. The spirit determines

the letter. The system must not be misconceived as designing to minimize the importance of detail work in language. It rather attempts to vitalize such work. By laboring incessantly for clearness of thought it goes far toward insuring clearness of expression (and by clearness is meant technical accuracy without which is chaos); but none the less does it recognize the correlative truth, that clearness of expression reacts upon and still further clarifies thought. The children are led little by little to make more effective for purposes of communication the spontaneous expression of their own thoughts, and in this way some principles of technical composition and grammar gradually become clear-cut to them.

For example, the principles of unity and proportion in paragraphs, and the different types of paragraph structure, may in this way be early impressed upon the pupil's mind. Next naturally follows the proper relating of the parts of the paragraph through the use of coördinating and subordinating connectives, relatives, parallel construction, and the like. The minute structure of the paragraph may then be attacked, and the pupil's attention called successively to such matters as the unity and coherence of the sentences, the principles of good use, the origin and history of words, the use of prefixes and suffixes, the discrimination of synonyms, and the value of the various figures of speech. The sequence also lends itself readily to study the different types of discourse, namely, description, narrative, exposition, and argument.

To illustrate all phases of this technical study of language, as pursued through the medium of the sequence, would require a good deal of space. It will, perhaps,

be sufficient to give a few examples from that most perplexing subject, technical grammar. Suppose that the work for the day is to bring the pupils to an appreciation of the nature of descriptive adjectives. The teacher says nothing about descriptive adjectives. She does not even introduce the term. Instead, she presents to the children some story which lays hold upon their interest, let us say the story of Orpheus. Her aim now is not to discover whether they can use the term "descriptive adjective" glibly, but first, whether they have clear mental images of the personages and events of the story, and second, whether they can express these images. She may ask one child how he pictures the appearance of Orpheus. Remembering that Orpheus is the son of Apollo, the child may reply, "I think of him as having golden hair." "But," asks the teacher, "how can you say what you think of him in the shortest way?" And one child or another will reply, "The golden-haired Orpheus." In similar fashion some child might think of his power, and call him "the *mighty* Orpheus." Another might think of him as he was after he had lost Eurydice, and call him "the *stricken* Orpheus." And so on. In this way a series of pictures of Orpheus as he appeared at different stages of the story could be drawn out, the descriptive adjective in every case coming as the result of the mental image formed by the children. The net result could then be summed up in some such sequence as the following:—

The golden-haired Orpheus played.
The lovable Orpheus charmed.
The mighty Orpheus won.

The stricken Orpheus grieved.
 The forlorn Orpheus visited.
 The faithful Orpheus secured.
 The anxious Orpheus lost.

When the story had been fixed in mind, the teacher would, by questioning bring out the use of the adjectives, and give the technical name for such words. If the children were old enough, the teacher might at this point refer them to their text-books for a more accurate statement of the definition.

The following illustrate the application of the sequence to a variety of grammatical conceptions.

GRAMMATICAL SUBJECT AND PREDICATE—NOUN AND VERB:—

Orpheus played.	Orpheus visited.
Orpheus charmed.	Orpheus secured.
Orpheus won.	Orpheus lost.
Orpheus grieved.	

LOGICAL SUBJECT AND PREDICATE—NOUNS:—

Orpheus, the son of Apollo,	played on the lyre.
The mighty Orpheus	charmed all who heard him.
The beautiful musician	won the love of Eurydice.
The golden-haired son of Apollo	grieved for his lost wife.
The grieving god	secured Pluto's consent by his wonderful music.
Orpheus, not able to resist temptation,	lost the wife he had regained by so much effort.

PRONOUNS:—

He played.	That visited.
Who charmed (what)?	Which secured?
This won.	One lost.
Each grieved.	

THE POSSESSIVE CASE:—

Apollo's son	played.
The sungod's heir	charmed.
Eurydice's lover	won.
Sorrow's victim	grieved.
Hope's encouraged hero	visited.
Music's best-loved master	secured.
The lyre's master	lost.

VERB PHRASES:—

Orpheus	had played.	Orpheus	was grieving.
Orpheus	did not only charm.	Orpheus	would have secured
Orpheus	had won.	Orpheus	must have lost.

ADVERBS:—

Orpheus	played	skilfully.
While	Orpheus	charmed { often.
		{ easily.
Before	Orpheus	won { already.
		{ eventually.
Orpheus	grieved	{ much.
		{ continually.
Orpheus	visited	{ there.
		{ finally.
Orpheus	secured	accordingly.
Orpheus	lost	afterward.

PREPOSITIONS:—

Orpheus	played	on the lyre.
Orpheus	charmed	by his music.
Orpheus	won	ere long.
Orpheus	grieved	without hope.
Orpheus	visited	notwithstanding the difficulties.
Orpheus	secured	because of the magic of his playing.
Orpheus	lost	despite all he had endured.

VERBS, TRANSITIVE AND INTRANSITIVE:—

Orpheus played.
Orpheus charmed — trees.
Orpheus won — Eurydice.
Orpheus grieved.
Orpheus visited — Hades.
Orpheus secured — the consent of Pluto.
Orpheus lost — Eurydice.

CONJUNCTIONS :—

Orpheus charmed not only the objects of nature, but people as well.

Orpheus won the heart of nature, moreover the love of the fair maiden Eurydice.

Orpheus grieved, but not alone, for all nature grieved with him.

Orpheus visited Pluto { in order that he might regain Eurydice ;
still he had much to do to win his consent.

Orpheus secured the consent of Pluto when he brought tears to the eyes of Persephone.

Orpheus lost Eurydice because he looked back.

VERBS, ACTIVE AND PASSIVE:—

Orpheus	played and nature was moved.
Orpheus	charmed and trees were uprooted.
Orpheus	won and Eurydice was gained.
Orpheus	grieved and the world was saddened.
Orpheus	visited Hades and Pluto's heart was melted.
Orpheus	secured his consent and Eurydice was delivered to him.
Orpheus	lost Eurydice and was punished.

PARTICIPLES AND INFINITIVES:—

Orpheus, playing, moved stones.
To charm all nature was the gift of Orpheus.
To win Eurydice required the skill of Orpheus.
Orpheus, grieving for his loss, wandered o'er the earth.
Orpheus planned to visit Hades.
Securing the consent of Pluto, he led his wife forth.
To lose Eurydice now, was to undo all his weary work.

The playing Orpheus—Playing his magic lyre, Orpheus drew to him all nature.

To Orpheus alone it was given to charm even the stones.

Winning the love of Eurydice, his happiness was complete.

The grieving Orpheus—Grieving for his lost Eurydice, Orpheus caused gods and nature to mourn with him.

Orpheus overcame all obstacles in his determination to visit Hades.

Pluto's consent secured, Orpheus now led Eurydice forth.

The use of the sequence in reading demands perhaps a brief statement before leaving this subject. In the first grade, as in all others, every story is told from a sequence-skeleton in the teacher's mind. When it has been told by the teacher, drawn from the children by questions, and retold by several of them at different times so that the order of events is thoroughly familiar to them, the sequence is written or printed upon the board, and the children read it, not from knowledge of a single word or letter, but simply because they know what is said, and the order in which it is said. They are able, after some drill in that particular, to pick out any given line, such as "The caterpillar grows," from any other; at first because of the order in which it occurs, but later when the teacher has disarranged the original order. Having learned to identify each line in any position upon the board, they come to know each word, as they have previously become familiar with each line.

In this way the sequence is used for teaching reading

by the logical method of differentiating a homogeneous whole into its constituent elements. This plainly is simply an extension of the idea involved in the old "word" and "sentence" methods, and, it is believed, marks such an advance over the ordinary method of learning to read from words up to sentences, as did the word-method over the still older plan of proceeding from letters to words. It is first and essentially thought-reading; only later and secondarily the reading of signs of thought. In the opinion of the teachers who have used this method, it has conclusively demonstrated that a child can read anything it can understand, lack of comprehension of the thought involved being the only barrier, not the number of syllables in a word, not poetical inversions of structure, or any other formal condition whatsoever. The telling of the story by the children, and their answers to questions upon it, serve as a test of their comprehension of the ideas involved; and from this point their ability to read the story is assured.

It will hardly be necessary to describe in detail the use of the sequence-method in geography, measure, natural science, history, civil government, drawing, and the other branches taught in the school. The general statements made heretofore upon the subject will serve to indicate the typical manner of its use. It might be added that to say that the sequence is used in all these subjects is only to affirm that the principle of organization permeates the details of the work in all the grades. There are not two principles here, but one. Each individual lesson is an organization no less than is the whole system. The sequence is not for itself, but for organization.

CHAPTER VI.

THE FORMAL STEPS.

ON the method, or formal, side, the work embodies the fundamental principles discussed in the previous chapter. Not, indeed, that the methods employed have been adopted with a view to their consonance with the general theory. In fact, as has been already perhaps sufficiently indicated, the general theory was born of the practical work, not the work of the theory. And the methods used, both in general and in detail, have come into being as the result of long experimentation, being in no sense deductions from a preconceived idea. They may all, however, be interpreted in the light of the fundamental principle of the entire system — that of the progressive organization of interests. For instance, each lesson is presented by the teacher according to certain formal steps¹ which seem to represent most definitely the essential stages in the organization of any new interest. These steps may perhaps appear unnecessarily rigid in terminology and distinctions, but they should be regarded by the teachers essentially as guide-posts, unimportant in themselves, though all-significant as indicators of the road.

The teacher should first prepare for every lesson, on

¹ It should be stated that these formal steps are an adaptation of those defined by the Herbartian school.

her own part, by thinking out in detail the subject-matter of the lesson in its relations to the interests of the children as she knows them, determining definitely, on this basis, both the general and the specific purpose of presenting the subject to them at all. On the children's part, she will make preparation by bringing to the foreground of their consciousness some known interest of theirs, which the material she intends to present will still further stimulate and satisfy. Suppose, for instance, that she wished to give a lesson upon the Invention of Printing. She will prepare for it by recalling to the children's minds the progress they have before noted in the means used for communication, from the carved stone or vase of the Ancient Aryans, through the Persian stamped bricks and cylinders, the Greek vellum manuscript, and the Roman papyrus rolls, down to the illuminated parchment of chivalric days.

Their interest in this progressive development now demands further satisfaction in the presentation of the new materials, namely, the story of the cheapening of paper, the experiments with block-printing upon it, and finally the invention of movable types.

The next step is termed "organization," though the name belongs rather to the whole process than to any single stage in it. However, since this step is the climax of the lesson, and no other word seems adequate to convey the breadth and thoroughness of the desired interrelating, the term "organization" may perhaps be allowed to stand. The new material, if it is not to be a dead weight instead of a vital experience, must grow naturally out of the previous knowledge of the children, enriching all the old facts and giving impetus to

the organization of new. To insure this result, the teacher must not only see that each point presented is clearly conceived, but must develop carefully from the history of former methods of communication, and from the history of the age in which printing was invented, the relations, industrial and social, between this period and all others, which made such invention possible in its own age as not before. By this means the children are enabled to discover the meaning of this new invention and of the long struggle toward it through the ages. By tactful questioning they can be led to see for themselves why men wanted means of communication at all, and thus to formulate with greater or less definiteness the idea of the brotherhood of man, the unity of society, or the principle of coöperation—whichever forms of the conception may seem most natural or true. This point is, of course, not to be forced; but if the interest of the children be fairly met at every point and not obstructed by the presentation of the facts really or apparently unrelated, they will follow its trail far beyond the blazings of ordinary travel, to the ultimate meaning discernible by them. This step is called generalization or abstraction.

The underlying meaning or principle should, when disclosed, be used as a clew to determine the significance of other related phenomena. In this case the meaning of communication may be applied to the newspapers of the present, to the letter-writing of the children, and to written work they do in school, with a view to establishing the essential characteristics of such forms of intercourse. And this application may, perhaps, enable the children to see why their own writing should be

interesting and clear for purposes of effective communication, as they might not otherwise see it.

The last step, that of reproduction or expression, should be, if reproduction, either the drawing, making, or description of a printing-press, or if expression, the children's own use of the principle of communication as they understand it. They may, for instance, write the story of the invention of printing in such a way as best to answer the ends of communication, illustrating it with drawings or models of their own, representative of the various stages of development in the art of written or printed intercourse.

Such are, in large, the formal steps followed by the teacher in the presentation of new material; namely, preparation, presentation, organization, generalization, or abstraction, application, and expression. They, like formalities of every sort, will be found better calculated for service than for authority. The live teacher, however, does not need such caution.¹

¹ See Appendix C.

PART II.

OUTLINES OF THE PRACTICAL WORK.

* “That they might have life, and that they might have it more abundantly.”

CHAPTER VII.

INTRODUCTION TO THE OUTLINES.

A FEW words of explanation may perhaps be necessary before taking up the work for the grades outlined in the following chapter.

In the first place it should be stated that the outlines which follow were prepared upon the supposition that the reader has previously followed with some care the account given in Chapters I.-V. of the general theory of the work and the specific methods employed. Accordingly the teacher who approaches the outlines without this preparatory study will inevitably lack the clews necessary for an adequate comprehension of the details of the system as applied.

As to the outlines themselves, they are in the main what the term indicates, — not by any means complete and rigid definitions of the work to be done in each grade, but suggestive sketches of some work which actually has been and is being done in these grades. The details of such a system are literally infinite. No effort has been made to set down upon these pages an exhaustive list of the points covered or the devices used; in the first place because of the manifest impossibility of so doing without swelling the book to undue proportions, and secondly, because to do so would be to invite slavish imitation rather than origi-

nality on the part of teachers who may wish to adopt the plan. The work of the lower grades has been written out more fully than that of the higher; both because the former involves a smaller quantity of material, and because the teacher has through study of the work in earlier stages become better fitted to handle that of the later periods independently.

The grades are distinguished by letter and figures, B indicating the first half-year, and A the second, so that B 3 means the first half-year in the third grade, A 2 the second half-year in the second grade, etc.

In planning this part of the book, it was at first a serious question whether the various periods should be assigned to grades at all; lest from such assignment the inference might arise, that a certain period in the history of civilization must invariably be handled in a specified year or half-year. Now, as a matter of fact, nothing could be farther from the spirit of the system than such rigidity. The question of correspondence has been discussed with some thoroughness in Chapter I. and will not be recanvassed here; but the statement should be made, to guard against any possibility of misconception, that in any school, no two consecutive years may see precisely the same assignment of periods to grades. The general order of periods may indeed be followed, but it may very well happen that some periods will be rapidly glanced over, others dwelt upon for a considerable time, and sometimes two merged in one. The standard is always the children themselves. In some schools a predominance of a certain nationality or of a certain class of society with its characteristic conditions of under-feeding, or over-stimulus, will reduce to a mini-

num or unduly prolong a certain period, in which case of course the work must be adjusted to meet these conditions. And almost without exception it will be found at the beginning of a year that in every room are one or more children whose stage of development corresponds to a period other than that to which the grade is devoted. And in this case the pupil should always be transferred to his proper grade. In all cases the actual status of the children's minds determines the work to be done. It will be noticed that sometimes a half-year is devoted to each period treated, and sometimes two periods are covered in a single semester, as in the case of the Germanic and the Chivalric periods, in B 3. This arises, as has been intimated, from the needs of a particular school as shown by actual experiment. Other schools drawn from different classes or nationalities would undoubtedly demand a different assignment of the periods.

The analysis of character under each period is, primarily, an analysis of the development of the child at the stage in his life to which the period in question should be assigned. It is thus intended for the guidance of the teacher herself, to enable her to place the children in their proper grades, so far as she can determine them, and to take the children's point of view in presenting any material to them. The "Ethical Aims," it need hardly be said, should underlie all the presentation of material, not necessarily to be made explicit, but always to be consciously used by the teacher. These ethical aims represent the educational value of the period, and are thus supremely important.

Each period, as represented by a certain type-charac-

ter, is divided somewhat arbitrarily into various headings, such as Appearance, Clothing, School, etc., under which the life of the period is comprised. The purpose of these headings may be briefly indicated, first on the negative side. They are not designed to be blindly followed by the teacher in her presentation of the period to the children. Their purpose is largely that of convenience, enabling the teacher to trace for herself the various lines of progress from age to age, and thus to gain a more distinct and orderly conception of each period in its specific relations to every other. The divisions may also serve to assure the teacher that she has omitted no essential points in either preparation or presentation, and to test the knowledge of the children in reviewing a given period. But it must not be supposed that, in the study of the Roman period, for instance, the teacher shall conscientiously complete the topic of, say, social life, before she allows herself to touch upon that of the church. In any of the earlier civilizations, especially, the different strands of life are so intertwined that to attempt to keep them rigidly apart is to do violence to the spirit of the age itself. In general the order of topics set down may be followed, and whether followed or not it should always be clearly defined in the mind of the teacher; but only to clarify, not to dominate, the manner of presentation.

The material collected under these headings is considered first as embodied in somewhat commonplace or prosaic form in the actual clothing worn by the common people, the homes they really lived in, and the social, political, and religious life they themselves knew. But the life of the people may not all be comprised within

these more complete and prosaic forms. Much of it, comparatively, may not yet have reached that advanced stage of realization. Such portions we shall find expressed in their art — their architecture, sculpture, painting, literature, or music. And this feature of their civilization must not by any means be neglected, as it heralds the next step in the progress of the race, and hence of the world. The institutions and the art of a nation are, however, only the foreground of its life. In the background are always the physical conditions known to it, the configuration and climate of the country, its natural products, grains, fruits, trees, and flowers, its native birds and animals. These represent a controlling feature in civilization, definitely conditioning all progress.

The life of the people, as embodied in their art and in their practical life, and as conditioned by natural environment, constitute the raw material as it is to be used by the teacher, and has been placed, in the outlines, under the head of "The Story." Not that it is, in its present form, deserving of that name. It is, as yet, only material, sometimes only the references to the sources for material, which the teacher herself must cast into the form of a story, or rather, of several stories, adapted in thought and phrasing to the children of the grade. This story forms the basis or starting-point for all the following work of the period under this head.

Nature-study has for its purpose the revelation of the value and possibilities of natural environment. This is accomplished through showing from stage to stage the gradual progress of civilization through the discovery

of the adaptation of nature to men's physical, industrial, æsthetic, and spiritual needs, and through the study by the children of their own environments.

The sequence-method is used both in the information and observation lessons. The material representing the civilization of any age is traced back to its sources and the study of its life-history as a part of the natural world is followed by a study of the processes employed till it emerges in the manufactured object. In observation lessons the static condition of any object is meaningless except as it reveals past or points to future achievement; hence the use of the sequence.

"Comparison" means the relating of the life of this past civilization to the life of the present, with a view to enriching the child's consciousness of both. It involves a comparison of the physical conditions, scientific conceptions and processes, the everyday industrial, commercial, and social life of the past period with that of the present, and of the art of the period embodying certain ideals, with the art of the present expressive of modern ideals of the same subject.

In order to compare intelligently the civilization in question with our own, we must first compare it with the civilizations behind it, that we may see in what direction the line of progress seems to point. And not only do we compare the period studied with the past and with the present, both in their realized and in their more ideal aspects; but we compare the art side of every given civilization with its practical side, with a view to determining what influence the one exerted upon the other. The heading "Comparison," in short, indicates several cognate ways in which the material is handled.

Another way is by "Measure," the third sub-topic. Here "Comparison" is only carried a step farther, to greater exactness. The products, industries, etc., of the period in question are measured by the standards in use at that time. Our own corresponding products and industries are likewise measured by certain of our own standards. The standards of the period studied are compared with those of past periods and with our own, to call attention to the growth in exactness. As the process of using the standards of different periods involves the formation of exact conceptions both of number and of form, this topic represents the mathematics side of our study, as "The Story" and "Comparison" represent its history and sociology or philosophy side.

As the use of number arose from a demand for accuracy in limiting quantity, that is, in measuring, and as measuring is of value only when there is a standard of measurement, it would seem that children should be taught the ready and accurate use of numbers in connection with measuring by means of a fixed standard. Since also the use of numbers grew out of man's need, and is of value to the child only as it is connected with his everyday living, it should be presented by teaching him the use of the standards as he comes in contact with them in ordinary life. This requires a knowledge both of the standards used in supplying individual needs, and those growing out of the relation of the individual to social institutions. In order that the pupil may comprehend these thoroughly, the necessity for them should be brought out and the historical origin shown.

- Growth in knowledge is from the indefinite to the definite. Consequently in teaching number the order is

from the whole to the parts. In following this principle, standards are taught first as a whole, then the most obvious or essential parts and smaller units of measure composing the larger are taught, then other parts.

A standard may be taught as a whole in one grade and analyzed in the next, according to this principle, or in one grade the whole and parts most commonly used, and less well known parts or measures in the next grade. These standards should be taught by the actual use of them and by finding where they are used in everyday life.

Although number ideas are gained through their constant use in measuring by means of standards, the number concepts may be made permanent and the abstraction formed by finding where the same number concept has significance in nature, human life, or in art. For example, six has significance in nature in the parts of the perianth of the lily, the sides of crystals, the legs of a butterfly, the six points of a snowflake; in the affairs of human life in the six sides of a trunk or box; in art in the units of design having six parts.

To summarize: In the lower grades the children work with standards of measurement of different kinds, and the relations of number and the operations that may be performed with them are learned through their concrete use; in the beginning quite incidentally, but with more and more of conscious purpose. In the middle grades, while there is always a use for the numerical operation, the attention of the children is turned more particularly to the mastering of the operation till they achieve its ready and accurate use. In the upper grades, the emphasis is upon continually wider co-operation, which demands the application of what has

gone before. Thus the subject of interest may involve merely coöperation among individuals; taxes, among a community; brokerage and exchange, among nations.

•“Expression,” as the name indicates, means the natural outflowing of the brain-activity of the children, as stimulated by the presentation of the material, into the various channels of art and industry. It is not alone reproduction, but invention as well by means of spoken or written language, singing, drawing, painting, tracing, cutting from paper, moulding, and making. All this is as spontaneous as may be, the teacher leaving all that she can for the children themselves to contrive, not thinking for them, but stimulating them to think for themselves.

In conclusion it may be said that the wise teacher will first of all make herself thoroughly familiar with the historical material for her grade, from sources as near first-hand as possible, not relying upon the outlines to do her work for her. And in order to know this material in such a manner as to present it by comparison, she must necessarily acquaint herself with the material of all the other periods studied, particularly those prior to her own. And she will unceasingly study the children of her grade, determining the stage of mental development at which each has arrived, and adapting her work in accordance with the demands of the actual situation. To such a teacher these outlines may perhaps be suggestive, and thus to a degree helpful; but they will only lay upon her with still greater urgency the obligation to study her material (both that in the seats of the schoolroom and that on the library shelves), to use her own judgment, and to stand upon her own feet.

CHAPTER VIII.

THE WORK OF THE GRADES, IN OUTLINE.

HIAWATHA, THE INDIAN BOY.

Grade B 1.

Ages of children, 5 to 6 years.

A. ANALYSIS OF CHARACTER.

THE child at this age is yet in the dawning of his mental life. The dominant interest of this period of development may be characterized as sense hunger. His interest is a veritable hunger which, to satisfy itself, seizes upon every fact of the natural and institutional world that comes within the range of his senses. That which satisfies him holds him spellbound till the interest is exhausted or a new subject appears upon the horizon. The child may wander away allured by some fascinating object, as a bird or a hand-organ, totally unconscious that he is wandering and with no intention of doing wrong. As the child's craving is satisfied his senses are sharpened, his sense impressions grow to be clear-cut and vivid. If properly directed, he observes every phenomenon with exactness and comes to connect many of them with an antecedent phenomenon—to get some rudimentary notion of cause and effect. In brief, he begins at this epoch to organize

his knowledge. And this incipient organization creates of itself a demand for more knowledge. Every fact becomes doubly interesting to him because it stands in certain relations to other facts that he knows. As the child at this age has less power of inhibition than at later stages of development, his limbs seem more immediately to respond to motor impulses and to be more directly connected with his stream of consciousness than is always desirable. His curiosity leads him into daring exploits. Largely ignorant of the danger he incurs, he does not think of it at all. An adventure to him means little more than an experiment, a means of getting at some new fact or relation.

In his early observations, the child tends to see his world as one undivided whole, not distinguished even from himself; and he differentiates one phenomenon from another only as his experiences bring to light certain differences between them; his tendency being to see likenesses rather than differences. This means that at first everything to him is alive: flowers and birds talk to him; the stars smile or the moon frowns at him; animals think as he does; the child is, we say, imaginative. This is the period of his strongest affection for all things in nature. There is now no barrier between him and them. He is, in a real sense, one with them.

The child's constant experimentation, in the desire to learn new facts, teaches him after a while how he himself may produce certain crude effects under certain other equally primitive conditions. Thus he contrives crude means to his own ends, just as Hiawatha devised his own implements of warfare or industry and the necessary means of communication and of transportation.

B. ETHICAL AIMS.

The foregoing study of the character of the child at this stage of development will perhaps sufficiently indicate to the teacher what should be the aims of the work in this grade. The child's curiosity is quickened in every way possible. He is stimulated to ask questions about everything, and to answer those questions, so far as may be, for himself, by observation and by experiment, to use his senses and his wits in equal proportions, to be exact in observing and in describing or reproducing what is observed. He is left, wherever practicable, to think his own way out of difficulties; and thus learns not only to be more cautious about getting into trouble, but to be thoughtful, contriving, and self-reliant. His imagination is fed by the nature stories, in which personification is largely used, and kindness to all animate and inanimate things is made a habit.

To further these aims the child is encouraged to compare himself with Hiawatha in respect to self-reliance, ability to contrive, accuracy of observation, etc., until the ideal has taken firm root in his mind and is used as a standard unconsciously. The teacher takes care that, in general, the child shall measure himself against the ideal, rather than by another child in the room; for the latter course too easily induces feelings of superiority and self-righteousness.

C. MATERIAL.

In this grade the nomadic period of civilization is covered, Hiawatha, the Indian boy, being the type of the period, and Longfellow's Hiawatha the basis of the

study. The Indian boy had to depend upon the keenness of his senses for food, clothing, and shelter. He had only the germ-ideas of civilization. This period has been chosen as representing most adequately the mental status of the child just entering school.

I. Character.

The chief characteristics have been indicated under "Analysis of Character." It is intended that the material suggested under this topic, as under all others, should be used as needed, and to the extent that is profitable. The order here is logical, and not necessarily pedagogical. Very few would care to use all the material. The selection should grow out of the needs of the particular children the teacher is working with.

• Illustrations of Curiosity:—

(a) Positive (that is, with a positive ethical bearing, commendable):—

"What is that, Nokomis?"

"Learned of every bird its language," etc.

— *From Hiawatha.*

(b) Negative (that is, with a negative ethical bearing, to be used as a warning):—

Story of Goldilocks and the Three Bears.

Instances of Daring:—

(a) Positive:—

Hiawatha's slaying of the deer; the killing of Pearl Feather.

(b) Negative:—

The Chicken's Mistake, by Phœbe Cary.

Instances of Imagination :—

(a) Positive :—

“Learned of every bird its language”;
 “Of all the beasts he learned the language”;
 “Talked with them whene’er he met them,” etc.

— *From Hiawatha.*

The House in the Woods.

The Story of the Dog Sultan.

The Story of the Queen Bee.

— *From Adler’s Moral Instruction of Children.*

(b) Negative :—

The Story of the Good Dog, from Victor Hugo’s “Tales to His Grandchildren,” by Brander Matthews, in *Wide Awake*, November, 1886.

For Parallel Stories may be used :—

Selections from Æsop’s Fables, such as :—

The Stag at the Lake,

The Cat and the Birds,

The Gourd and the Pine,

The Oxen and the Axle-Tree; and some of the Uncle

Remus Stories, by Joel Chandler Harris.

Instances of Contriving :—

(a) Positive :—

Hiawatha’s picture-writing and canoe-building.

The Crow and the Pitcher, from Æsop’s Fables.

(b) Negative :—

Story of the great philosopher who cut two holes in the wall of his study, one large and one small, by which the cat and her kitten might come in and go out as they pleased.

II. The Appearance of Hiawatha.

1. THE STORY.

Hiawatha was a tall boy for his age, with a straight and slender figure. His face was the color of a copper

cent (the head on a cent is shown), his hair black and straight, his eyes dark, and his cheek-bones high.

Remington's Indian pictures, especially the illustrations of Hiawatha, are used freely. (Pictures of a boy should be shown, not of a man.) With these may be compared pictures of children of the present time in children's books and magazines, such as:—

St. Nicholas,
The Child Garden,
Little Men and Women, etc.

2. COMPARISON.

The children of the school are compared with Hiawatha in the foregoing points, that they may understand clearly just how Hiawatha looked.

3. MEASURE.

With the aid of the teacher the children measure their own and each other's height, girth, length of limb, the distance each can see and hear, and the keenness of his sight and hearing. Each learns to count up to the number of years in his own age. They learn the Indian method of measuring time by moons, the names of the different moons, the names and the number of the months in the school year. They learn the foot as a whole, and as made up of twelve inches, the half-foot, the quarter, and the third.

4. EXPRESSION.

The figure of an Indian boy having been outlined by the teacher, the children cut it out, fill in the needed lines, and color it with crayon or paints, or they cut from paper, without drawing, a representation of Hiawatha. They then draw some child in the room,

and color the picture. The children should bring in or have given to them pictures to illustrate the seasons, months, articles used in the care of the body (as sponge, bath-tub, combs, brushes, etc.).

The children should keep notebooks in which certain kinds of work may be placed as a record of progressive development. Many times pictures cut from magazines and papers may be pasted in the books to illustrate some subject studied, sometimes mimeographed copies of the teacher's work, sometimes the children's own work.

SONGS: There was a little girl.
 To be as sweet as a sweet red rose.
 — *From St. Nicholas Song Book.*

READ: "And he looked at Hiawatha,
 Looked with pride upon the beauty," etc.

5. SENSE TRAINING.

The senses should be tested on the child's entrance into school. This being particularly the period for sense training, in fact the period being in its culmination and decline, much should be done to train the child in observation, both of objects as wholes and in what might be called the abstract qualities of objects, as color, form, size, position, etc. This should never be isolated work, but should be the outgrowth of the topic of study. Results should be expected in discrimination, reproduction, and vocabulary. Much of the sense training can be in the form of games, also the exercises for the development and training of the body, especially the limbs. The games should include those for strength, self-control or precision, and grace. There

should be an effort to direct activity in all possible ways rather than an attempt to repress activity. Other games should be for the interpretation of the child's environment, both natural and institutional. Games for the expression of an ethical ideal constitute the most appropriate and valuable form of expression. Suggestions for games can be found in the *Pedagogical Seminary*, Vol. III., G. E. Johnson, "Education by Plays and Games."

The following outline is given as a suggestion. It contains considerably more than can be used except where the children of this age are in the kindergarten instead of a primary room. The work should be carried on at least up to the seventh year. It should be remembered that for results there should be several impressions and imagings of the impressions, that the work should be followed up day after day, that there should be training of all the different senses, and of each sense in more than one direction. Suggestions may be gained in the psychological works of Ziehen, Titchener, Scripture, Wundt, Baldwin, Halleck, and Ladd.

THE EYE.

Color. Spectrum, shades, tints, hues, selected, sorted, arranged, matched.

Forms, shapes, lines, distinguished.

Materials, metals, woods, fabrics, minerals.

Animals distinguished. Plants distinguished. Occupations interpreted.

Aspects of the heavens: by day, by night. Landscape analyzed. Pictures analyzed.

• Collections of objects named (quick perception), natural, manufactured, artistic. Range of vision. Distinctness and position of lines.

TEMPERATURE.

Test by feeling (indefinite); by thermometer. Find boiling and freezing point.

Heat capacity of different materials: { metals.
 { woods, etc.
 { fabrics.

Heat capacity of different animal coverings; of different soils.

The teacher should keep the records of the tests of the children's senses as a basis for her own study of the children during the term, and at the end of the term should give them to the teacher who teaches the next grade, who will compare these records with those she makes of the same children. She should also look for signs of fatigue and lack of nutrition.

III. Hiawatha's Clothing.

1. THE STORY.

Hiawatha wore a deerskin skirt, mantle, moccasins, and leggins, a belt of wampum about his waist, and eagle or turkey feathers on his head.

This is the ordinary clothing of the Indian. Hiawatha's dress, as described in the poem, included magic mittens and enchanted moccasins. The more elaborate, festal dress is described as that of Pau-Puk-Keewis, at Hiawatha's wedding feast.

Stories from the poem used in connection with this topic are Iagoo's present to Hiawatha of a bow and arrows, and Hiawatha's killing of the deer (to show the source of the principal material used for clothing).

2. COMPARISON.

Hiawatha's clothing is compared with that of the boys and girls in school, as to its material, the work

done upon it, the implements employed, its form, its usefulness or durability, its beauty.

Specimen questions upon this point are the following : —

What are our magic moccasins (steam and electric cars), and mittens (machinery)?

Why did Hiawatha not wear woollen, cotton, silk, or linen, as you do?

Why did he have so many things of deerskin?

Why did he use quills from the hedgehog?

How long do you think it would take to make Hiawatha's clothes?

How long would they last?

Would he be likely to have many suits of clothes?

How could he keep clean?

How do you keep clean?

Have you many suits of clothes?

How long do they last?

Did Nokomis sew his clothes? How?

Who makes your clothes? How many people?

Why not one?

How long does it take?

What takes the longest time?

How much does it cost for material? Time? Work?

Would you like to wear clothes like Hiawatha's?

When would you prefer to wear such clothes, in winter or in summer?

How do you buy your clothing?

How much does it take?

How much does it cost?

Do you think Hiawatha's clothes are as pretty as yours? Why?

How long have you worn the dress you have on?

Will it always be long enough?

At what kind of store do you get the material for your clothes?

3. MEASURE.

The expression work is so arranged as to demand exact measuring and counting. The dress of the doll

is made by measurement. Beads are put into patterns in such a way as to require counting. The yard is taught by the practical use of it as a measure, then the half-yard, the third of a yard, the quarter-yard; the foot as a whole, then its half, its third, its quarter, the number of inches and the square inch; the dozen and the half-dozen; the dollar, the half-dollar, the quarter-dollar, the dime. The children themselves bring in facts gained at home as to the use of these standards in the daily life of the family, and from these facts the teacher makes simple problems.

As sources for some of the clothing and adornments, the deer, the hedgehog, and the wild turkey may be studied in their proper sequences.

4. EXPRESSION.

The children dress a doll for Hiawatha, and one for a child of the present. They string beads of the Indian colors, red, black, and white, and make them into patterns for trimming. They make a fan of turkey feathers. They tell in sequence about the processes of tanning skin and making beads, and that of making a dress of the present time. They draw pictures to illustrate the stories used. They make something which requires the use of the different standards they have studied.

READ: "From his lodge went Hiawatha
Dressed in deerskin shirt and leggings," etc.

Cut out and color pictures of different garments for Hiawatha and children of the present time. Sort fabrics, match colors. Draw or cut from magazines pictures to illustrate the garments mentioned, the process of making, and the implements used.

IV. Hiawatha's Home.

1. THE STORY.

Hiawatha's home was the wigwam of Nokomis, which stood by the shores of the bright lake, with the dark pine forest behind it.

An idealized picture of the Indian wigwam is found in the story of Hiawatha's wooing, as a description of the home of Minnehaha.

The wigwam of Nokomis was made of poles fastened together at the top and covered with deerskin. It was only about as large as one of the rooms in your home. There was only one room in the wigwam, and but one door. A hole in the roof served as a chimney to let some of the smoke out.

Here Nokomis rocked Hiawatha in his little linden cradle which the old Iagoo had made and carved for him. Here she cooked his food, here they ate their meals, and here they slept at night.

As nature-study, the children learn the life-history of some tree which is convenient for observation, beginning at a point appropriate to the season. They study the forest as a protector, as a source of supply, as the home of animal and plant life, as a source of enjoyment; the lake as a source of supply, as the home of animal and plant life, as a means of communication and enjoyment. The effect of a change of seasons on both forest and lake is brought out in story form, and the thought appropriate to the season impressed.

The autumn-thought is, in general, storing, providing; feeding, giving; the winter-thought, rest, sleep; the spring-thought, awakening, preparing; and the summer-

thought, flowering, fulness of life. The first three, however, cover the period of the school year.

• The firefly, Hiawatha's lamp, may be studied in its proper sequence.

In connection with the work on Hiawatha's cradle, the teacher tells nature-stories about some "cradles that the wind rocks," such as nests, cocoons, buds, seeds, and fruits. The children study the life-history of those they collect.

In connection with the nature-study such number questions as the following are asked : —

How long does the wind rock the bird's cradle? the butterfly's? the milkweed's? the tree-bud's?

How long does it take a baby bird to grow up?

How long does its mother take care of it?

How long ago were you a baby?

How long did you have to be taken care of?

• How many people took care of you?

2. COMPARISON.

The home of Hiawatha is compared with the homes of the children in the school, as to appearance, material, tools used, size, cost, and comfort with especial reference to the lighting and warming.

Questions such as the following may be asked : —

What furniture had Hiawatha?

What have you?

Why did not Hiawatha have more?

What could you do without?

What more would you like to have?

Where did Hiawatha get his?

Where do you get yours?

• What kind of lamp had Hiawatha?

How was the wigwam kept warm?

What makes the smoke go out at the top of the wigwam?

Where does the smoke go out of your house? What makes it go out there?

Where was Hiawatha's bath-room?

Instead of going out to get your food in the forest, where do you go to get it?

3. MEASURE.

The children count the number of rooms, doors, windows, chimneys, pieces of furniture of certain kinds, in their houses and in the house of Hiawatha, measuring parts of their own houses or furniture in yards, feet, and inches, or other appropriate standards. In the construction of the wigwam and the play-house, everything is done by exact measurement.

4. EXPRESSION.

Both a wigwam and a modern play-house are constructed by the children, with their different environments, and internal arrangements, furniture, dishes, etc. Pictures are drawn of both structures as a whole and of certain of their contents. Hiawatha's cradle is both made and pictured. The nature-stories about cradles that the wind rocks are illustrated by drawing or painting from the objects.

Pictures are put into notebooks of Hiawatha's home, and of the modern house showing different rooms, articles of furniture, and utensils. Only those should be chosen that had their beginning with Hiawatha or for which the children see a correspondence (as Hiawatha's method of cooking and our method with the special room for the purpose).

In this study of the home, it is expected that the

children will begin to gain a love for the larger aspects of nature, through sympathetic study of lake and forest, and to formulate an ideal of the home. As aids toward this end may be used boat-songs, songs of the forest and songs of home, pictures of lake and forest, of the Madonna and Child, of pleasant modern interiors and home-circles. (It should be noted, wherever pictures of the Madonna or of the Christ-child are suggested, that they are in all cases to be used with no religious or sectarian significance, but as typical of the universal ideals of motherhood and childhood as expressed in art.)

READ: "By the shores of Gitche Gumeë," etc.

V. Hiawatha's Food.

1. THE STORY.

• Hiawatha ate deer, buffalo, and bear-meat in their season, fish of many kinds, squash, corn, wild rice and pumpkins, strawberries, blueberries, gooseberries, grapes, melons, and maple sugar.

For some of these articles of food see Hiawatha's Wedding Feast, and the account of his fasting.

The sequence of the growth of corn is observed and studied by the children. They follow the seed through its whole life-history. They also study its grinding and cooking for food. The fertilization and production of seeds, being in the large, can be easily studied by the children and forms a basis for all their future plant-study. The study of the corn should be followed by the story of Mondamin from Hiawatha. For a parallel study is used the sunflower, out of which the Indians made flour. Other articles of food used by Hiawatha

should be studied in the same fashion, selecting from the list those which are appropriate to the season.

2. COMPARISON.

The child compares our own food at the present day with that of the Indians, as to ways of obtaining, preserving, preparing, and serving it.

Such questions as the following aid him in doing this:—

What do you have to eat for breakfast? Dinner? Supper?

Where did these things come from?

What did Hiawatha have?

Where did they come from?

What do you ever buy at the grocery?

What did Hiawatha get instead of this?

How did he get it?

What did you pay for what you bought?

What did you ever buy at a baker's?

What did it cost?

How does your mother cook your food?

What does she do first? What next, and next?

How many things could Nokomis cook at once?

How many can your mother cook?

Tell something she cooks, all the different things she does.

How long does it take?

What utensils does she use, how much do they hold?

How does your mother tell how much to use?

Did the Indians need good teeth to eat their food?

What can you do to have good teeth?

Did Hiawatha have a table in his dining-room?

How many dishes did Hiawatha have?

Did he have spoon, knife, and fork?

What were they made of?

How many do you have?

Did you ever set the table?

Where does the fire come from that cooks your dinner?

How did Nokomis light a fire to cook Hiawatha's dinner?

What kind of dishes did she use to cook with?

What kind does your mother use?

How did Nokomis cook Hiawatha's fish?

How does your mother cook fish for you?

3. MEASURE.

The children learn the use of quart and pint measures, and what a set of spoons, cups, etc., is. They play buying and selling different articles, measuring correctly the amount sold, and paying for it with real pieces of money.

Such questions as the following aid in establishing notions of number :—

How many were there in Hiawatha's family?

How many in yours?

When you set the table, how many plates do you put on? How many cups and saucers? Knives? Forks? Spoons?

• Did you ever break any dishes?

Did it make any difference?

Did any one have to go without?

What did it cost to get new?

Where do you get dishes?

How do you usually get them?

How many in a set?

4. EXPRESSION.

Clay dishes are made by the children. Baskets are covered on the outside with clay, so that they can be used for heating water. The story of Mondamin and all the nature-sequences are told and illustrated by the children. Toy dishes or real ones are brought to the schoolroom, and the children taught how to set a table neatly and precisely. The children make the different

standards used, and draw pictures of the pieces of money they know.

READ: "Make a bed for me to lie in,
Where the rain may fall upon me," etc.

VI. Hiawatha's School.

1. THE STORY.

Hiawatha went to school in the forest, on the lake, and down the river. He learned about all that he saw and heard; the sky, the moon, the stars, the rainbow, flowers, the lapping of the waves on the beach, the whispering of the winds through the pine trees, the chattering of the birds, and the talking of the beasts together. Nokomis taught him some of these things, but the most he learned for himself from the birds and the beasts that he loved. The old Iagoo taught Hiawatha how to make his bow and arrows, and the hunters of the tribe taught him how to use them. Hiawatha learned how to fish and to hunt, to run swiftly, and to shoot the arrow, to make for himself a canoe, a wigwam, and all things that he needed.

Hiawatha's natural environment and that of the children are studied, so far as may be. The children learn the life-stories of the flowers which Hiawatha knew, and which are known also by them, such as the dandelion and the water-lily; of the trees, oak, pine, and maple; of the owl, the brown sparrow, the woodpecker, and the robin. These birds that Hiawatha knew are successively compared with other birds that the children know, such as the canary, the humming-bird, and the duck, the teacher bringing out in every case the

relation of structure, color, environment and life-habits to each other.

STORIES: How the woodpecker got his crimson tuft.

— *From Hiawatha and Pearl Feather.*

The Indian legend of Robin Redbreast.

Robin Redbreast, Wm. Allingham, in *Open Sesame*, Vol. I.

Little Bell, T. B. Westwood, in *Open Sesame*, Vol. I.

The other animals Hiawatha knew are later studied in much the same way: the squirrel and the rabbit, the beaver and the bear. The two latter cannot usually be studied except from information supplied by others.

Landseer's and Rosa Bonheur's animal pictures are used in this connection, and Titian's Madonna of the Rabbit will be found useful.

In the nature-studies of animals, plants, seeds, etc., the teacher personifies very largely; and the children consequently do the same in telling the stories themselves.

The children learn the changes in the appearance of the moon, and how these changes are used for measuring time. They point out the Great Dipper, the Great Bear, and the Milky Way.

STORIES: Peep Star, Wiltse.

The Story of the Dipper, Wiltse.

In studying the rainbow they learn its relations to rain and become familiar with the spectrum. The winds are studied in a general way as to their direction, their force, and their effects.

In connection with the rainbow may be used "The Story of the Ray Children," from the *Child Garden*, and Wiltse's "Story of a Raindrop." Experiments are made to show evaporation. With the work on winds is read or told "A Story for Willie Winkie," by Wiltse.

A weather report is made every day by the children.

showing whether the day has been marked by sunshine, clouds, snow or rain storms, what the temperature was, whether there was dew or frost, the direction of the prevailing winds, etc.

For the idea of such a weather report, see Jackman's *Nature Study*.

2. COMPARISON.

Hiawatha's school is compared by the children with their own, as to size, structure, comfort, subjects taught, and hours of study, with a view to widening their conception of the school. In this comparison they come to realize that school means learning anywhere, and at any time, not simply the five hours a day spent within certain four walls.

3. MEASURE.

The children learn the number of days in a week. They estimate the cost of the things they use in school work, as sponge, slate, pencil. They measure by appropriate standards the things they make in expression work. The work with the colors of the spectrum, in laying the colors, and in finding related colors, gives ideas of number-relations. Any significant number-facts connected with the nature-study are now brought out, as the number and arrangement of toes of birds, rabbits, and cats; wings of birds or butterflies, petals of flowers of different kinds; points of the star, the snowflake, etc.

4. EXPRESSION.

The children reproduce, by means of drawing, coloring, or modelling, the natural objects they study.

The reproduction of what the children observe is made as exact as possible, that it may serve as a basis for habits of truth-telling.

- They tell the sequences growing out of their nature-study, and illustrate them by drawings. They tell, act out, and illustrate by drawings Hiawatha's contrivances, such as the building of the canoe. They make his bow and arrows, and a model of his canoe.

In this study the idea of coöperation begins to dawn, being suggested by the working together of all nature to make each flower, tree, and animal what it is. The same idea is further enforced by the story of the contributions of the forest to the building of Hiawatha's canoe. The children learn that Nature will help them, if they study her carefully and lovingly.

READ: "At the door on summer evenings," etc.

VII. Social Life.

1. THE STORY.

Hiawatha had two friends, Chibiabos, the sweet singer, and Kwasind, the strong man.

Stories are told to illustrate the strength of the one and the skill of the other.

These three friends always helped each other, and never quarrelled.

The ideal here is that of friendship. Loyalty and helpfulness in friendship are suggested.

Hiawatha and his friends played quoits and ball together, ran races and shot with bow and arrows, to see which could shoot farthest and fastest.

They would all be invited sometimes to a feast, such

as that which Nokomis gave when Hiawatha killed the deer. Messengers would go throughout the village with wands of willow to invite the guests to the feast. The guests would sit down and eat while the host and his family served them.

The description of the feast is derived from the account in the poem of Hiawatha's Wedding Feast. If the teacher prefers to have the children know Hiawatha only as a child, the description of the wedding feast may be left general, as above, or applied to the feast as given by Nokomis to celebrate Hiawatha's slaying the deer.

When all had finished eating, perhaps Chibiabos would sing a song for them, or Kwasind would show them what he could do with his great strength, or Iagoo would tell them a story. Each did what he could to make it pleasant for the rest.

2. COMPARISON.

The children compare their friends with those of Hiawatha, the feasts they know, such as Thanksgiving and Christmas dinners, with his, and their games with those of the Indians.

3. MEASURE.

The children count their friends, the number of games they know how to play, the parties they have attended, the days in the year when they invite people to their houses, and have a special dinner or supper for them. The girls tell how they set the table when they have doll parties, and how many dolls they have. The boys tell the number of marbles or tops each owns.

4. EXPRESSION.

The games of Hiawatha are played by the children. They tell, act out, or represent by pictures, stories of Kwasind's strength, and the sequence of the feast. They try to sing as sweetly as Chibiabos played on the flute. They entertain the school by telling such stories as they know.

READ: "Two good friends had Hiawatha," etc.

VIII. Industrial Life.

1. THE STORY.

Iagoo made and carved from linden wood a cradle for the baby Hiawatha. For the boy Hiawatha he made a bow and some arrows with which he could get his food. With these Hiawatha shot a deer, and Nokomis cooked its flesh for food and made a coat for Hiawatha from its skin. From the skins of other deer, Hiawatha made him a wigwam in the forest. From cedar boughs and birchbark, larch fibres, and pine balsam, he made a canoe from which to catch fish for his food; and his friend Kwasind cleared the river for him, so that he could paddle down it in his canoe. Nokomis raised corn, and ground it to make flour, while Hiawatha made dishes of wood, horn, shell, and clay, in which Nokomis could cook and serve their food. All these things and many more must Hiawatha do, or have done for him, in order to live at all.

2. COMPARISON.

The children find out what they have to do and what has to be done for them, in order to supply them with

food, shelter, clothing, etc. They trace their clothing, for instance, back to the raw material, comparing the process at every stage, the number of people occupied with it, the length of time required, etc., with similar facts concerning the clothing of Hiawatha. Hiawatha's canoe is compared with our boats, wagons, cars. The clearing of the river by Kwasind is compared with the dredging children have seen on the river. Most of these points have been previously covered, and here are only massed, for the sake of showing that, though Hiawatha had to have other people do some things for him, we are far more dependent upon others than he was, because we have more comforts than he had.

The children study the life-history of the materials used by Hiawatha in building his canoe, to see how each was adapted to the use to which he put it.

3. MEASURE.

The number of people who are needed to produce each of several necessary articles in the children's experience is estimated. The measurements used in making each of them are taken. The cost of each is calculated, so far as the children can do it, from the raw material through its various stages of manufacture or handling. For the work others do for us, we have to render some compensation. We have to pay ten cents to ride on the ferry-boat or five cents on the street-cars. This is much better than to have to make our boats or cars. The children learn the value of a dime, from its use in buying things which cost that amount or less. They learn the pieces of money that would be used in making change for a dime.

4. EXPRESSION.

The industrial activities of Hiawatha are reproduced by the children. They plant the corn, grind it to make flour, make such utensils as have not been hitherto constructed, "act out" Hiawatha's hunting and fishing, and illustrate everything by drawings or pictures.

The child learns, in the study of industrial life, still more of the necessity of coöperation. This idea is impressed in all his games. Each child has a "part" which he must perform or the game comes to a standstill. And from the notion of responsibility there flows naturally a conception of life as an organized whole, in whose coöperative activities each child has a necessary part.

READ: "Give me of your bark, O Birch Tree," etc.

IX. The State.

It will be difficult to give the children a clear idea of tribal organization. They may be told, if the teacher thinks best, that Hiawatha, because he had learned so well how to hunt and fish and provide for all his own needs, became when he grew up the chief of his tribe, and saw that all his people had what they needed to eat and wear, just as he himself had. His office may be compared with that of the mayor, the President, the superintendent of schools, or any other official known to the children.

READ: "You shall hear how Hiawatha
Prayed and fasted in the forest," etc.

X. The Church.

If the teacher thinks best, she may tell the children about Hiawatha's belief in the Great Spirit, his prayer

to the Great Spirit for food for his people, and its answer in the gift of Indian corn.

The chief value of the work under these two headings will be found later in comparison with similar institutions in other periods.

READ: "O, my children! my poor children!
Listen to the words of warning," etc.

REFERENCE BOOKS:—

Goodrich, Manners and Customs of the Indians.
Powell, Annual Report of Ethnology.
Brooks, Story of American Indians.
Schoolcraft, Myth of Hiawatha.
Schoolcraft, North American Indians.
Emerson, Indian Myths.
Old South Leaflets, Manners and Customs of the Indians.
J. Fiske, Discovery of America.
Mason, Woman's Share in Primitive Culture.

PICTURES SUGGESTED:—

Rosa Bonheur, The Monarchs of the Forest.
Raphael, Madonna del Cardellino (of the Goldfinch). Uffizi Gallery, Florence.
Raphael, Madonna of the Fish. Madrid.
Raphael, Madonna of the Pink. Lucca.
Raphael, Sistine Madonna (Mother and Child). Dresden.
Raphael, Madonna del Baldacchino (of the Canopy) (Mother and Child). Pitti Gallery, Florence.
Raphael, Madonna of the Legend. Madrid.
Raphael, Madonna of the Pearl. Madrid.
Raphael, Madonna di Casa Tempi. Old Pinakothek, Munich.
Leonardo da Vinci, Virgin, Infant Jesus, and St. Anne. Louvre, Paris.
Carlo Dolci, Madonna and Child. Pitti Gallery, Florence.
Carlo Dolci, Madonna and Child. Corsini Gallery, Rome.
Murillo, Virgin of Seville. Museum, Seville.

- Murillo, Holy Family of the Bird. Madrid.
 Correggio, Madonna della Scodella. Palazza della Pilotta, Palma.
 Correggio, Holy Night. Dresden Gallery.
 Carlo Maratta, Madonna and Child. Corsini Gallery, Rome.
 Van Dyck, Head of James, Duke of York. Windsor Palace.
 (Detail of the painting entitled Children of Charles I.)
 Van Dyck, Madonna, Child, and Saints. Dresden.
 Fra Filippo Lippi, Madonna and Child. Uffizi Gallery, Florence.
 Sassoferrato, Madonna and Child.
 Andrea del Sarto, Holy Family. Pitti Gallery, Florence.
 Titian, Madonna and Child adored by Angels. National Gallery, London.
 Piglheim, The Star of Bethlehem.
 Goodall, The Holy Mother.
 Il Rosso Fiorentino, Angel playing on his Lute.
 Greuze, The Little Pets. Louvre, Paris.
 Bouguereau, Madonna, Child, and St. John.
 Dieffenbach, In the Fields.
 Dieffenbach, Little Ducks.
 Peel, An Unexpected Meeting.
 Landseer, Animal pictures
 Walter Crane, Flora's Feast.
 Sir John Millais, Soap Bubbles.
 Gainsborough, Landscape.
 Elsley, I'se Biggest.
 Lawrence, Master Lock and Master Lampton.
 Mrs. Alma Tadema, Hush-a-bye.

RELIEFS SUGGESTED:—

- Della Robbia, Bambini. Duomo, Florence.
 Della Robbia, Madonna and Child (4). Florence.
 Della Robbia, Cupid (Head). Florence.
 Donatello, St. John in Boyhood. National Museum, London.
 Donatello, Madonnas (5). Padua.
 Fiammingo, Cupid Heads (3). St. Peter's, Rome.
 Thorwaldsen, Night and Morning. Thorwaldsen Museum, Copenhagen.

KABLU, THE ARYAN BOY.

Grade A 1.

Age of children, six years.

A. ANALYSIS OF CHARACTER.

For the child of this grade, the Hiawatha period of intense curiosity, imaginativeness, and contrivance has merged into the period represented by Kablu, a stage of curiosity somewhat less acute, of imagination somewhat less dominant, and of contrivance more complex and finished. In this stage the idea of possession is strong. The child is acquisitive, tenacious of his own rights, and not always regardful of the rights of others. But he soon learns that in order to retain his own possessions, he must respect the property-rights of others, and must even, when necessity arises, make common cause with them against a common foe. In this way he gets his first practical lesson in coöperation; and in much the same fashion he learns the necessity of obedience. This is the period in which the child, beginning to know more of danger, feels more keenly the need of protection. And thus family life, the shelter and protection of the home, mean more to him than they have done before or than they will for some time again. From this may be developed the idea of coöperation in the home, the duties of each member of the family, and of the child as a member of the family who is sheltered, nourished, and protected by it.

B. ETHICAL AIMS.

The thought for this period is coöperation, with its corollaries of respect for the possessions of others,

obedience, mutual helpfulness, and affection in the family. The school is regarded by the children as a larger family circle, or coöperative community, and all corrections and admonitions are made by the teacher upon the ground of community-interest.

C. MATERIAL.

Kablu, the little Aryan boy, represents the agricultural period in civilization. As Hiawatha learned little by little to satisfy his needs for food, clothing, and shelter, new needs arose, which could be met only by a more settled mode of life. The first indication of these new needs is Hiawatha's fasting and prayer that his people might have more stable subsistence than that gained by hunting and fishing. His prayer was answered by the gift of Indian corn, which heralded the passing of the nomadic stage of civilization. At this point we begin the story of Kablu, and trace the growth of this embryo instinct for permanency and possession through the agricultural period.

Character stories should be told or read to the children as illustrative of family affection. As suggesting the advantages of coöperation, the teacher may tell some of *Æsop's Fables*, such as —

The Blind Man and the Lame Man,
The Two Travellers,
The Two Goats,
The Old Man and His Sons,
The Bear and the Two Travellers,
The Ant and the Dove,
The Lion and the Mouse, etc.

As enforcing the duty of obedience in general, may be used *I Love You, Mother, and Obedience*, by Phœbe Cary. The negative side of this enforcement may be emphasized by the story of *Little*

Red Riding Hood, and of Adam and Eve as told by Adler in *Moral Instruction of Children*; the positive side, by the story of Tell's shooting the apple. For honesty, the story of Lincoln.

The stories originating in this period should be used whenever possible — those, for instance, of —

Cinderella,
Red Riding Hood,
Sleeping Beauty,
Jack and the Bean Stalk,
Jack the Giant-Killer,
The Seven-League Boots,
Toads and Diamonds, etc.

These are connected with the work of the grade, so as to bring out their significance, as in the story of Sleeping Beauty, cited under Kablu's House. The story of the Seven-League Boots may be used in connection with industrial life, as foreshadowing the railroads and fast ocean steamers of the present.

SONGS: Three Robin Redbreasts, and Suppose.

The children read Obedience, by Phoebe Cary.

I. Kablu's Appearance.

1. THE STORY.

Kablu was a fair child, with light hair and blue eyes. He was tall and stout for his age.

2. COMPARISON.

Compare Kablu with the children in the room, and with Hiawatha, as to size, color of eyes and hair, paying some attention to the distinction of shades.

In this grade color is constantly noticed and discriminated. Whether special mention of the fact is made or not, the teacher is supposed to call the children's attention to it in connection with every object studied. The children learn to select, match, sort, relate, and lay the spectrum colors to learn shades and tints.

3. MEASURE.

Each child measures some other child's height, girth, and length of limb. The teacher measures sight and hearing. The children compare their ages and tell how many months there are in a year. They learn the names of the months in the different seasons, weeks and days in the month, and hours in a day.

4. EXPRESSION.

The children draw and color pictures of one child who looks most like Kablu and who poses for the rest. They sort colored papers, pieces of cloth or yarn, and weave paper mats, to show their discrimination of shades and tints.

READ: Where did you come from, Baby Dear? G. Macdonald.
Take Care.

II. Kablu's Clothing.

1. THE STORY.

Kablu wore a tunic of sheep- or goat-skin in winter, of wool in summer, a cap and shoes made of sheep-skin.

The sheep is studied as the source of wool, and the dog as the protector of the sheep. The children learn the story-sequences of the spider (a weaver) and of the caterpillar (a spinner).

For stories may be used:—

Mary had a Little Lamb.

The Little Boy in our House, Wiltse.

The Boy and the Wolf, Æsop's Fables.

The Story of David tending his Sheep, Bible.

The Good Dog, from Victor Hugo's Tales to his Grandchildren, told by Brander Matthews, *Wide Awake*, November, 1896.

Cinderella.

Songs: Little Bo-Peep, and Sleep, Baby, Sleep are appropriate.

Growing out of the study of clothing the children learn the principle of the processes of spinning and weaving. The children are shown pictures of the old Aryan spindle and loom. The children collect pieces of different kinds of material used for clothing, buttons, material or pictures that will show process of preparing material or making of clothing.

Kablu's clothing is compared, first with Hiawatha's, and then with that of the present child, as to material, color, shape, machinery for making, cost, difficulty of obtaining, and adaptation to the different seasons.

3. MEASURE.

The children learn how much material of all kinds it takes to make their dresses, coats, etc., how much each garment costs, and how much time it takes to make it. They add the time it takes to make their garments to the time it takes to make the clothing of the other members of the family, and find how much time the mother spends in sewing for them. The clothing of the dolls is made strictly by measurement and from patterns which they learn to cut. The children continue the work on the yard and its fractional parts, feet and inches, the dozen, the dollar and half-dollar as wholes, and the small pieces of money as wholes and with reference to their equivalents in smaller pieces of money.

4. EXPRESSION.

The children dress an Aryan doll, with tunic made of black or white woollen cloth, and shoes made of eider-down flannel to represent sheepskin as nearly as may be. They also dress a modern doll. They make models of the old implements for weaving and spinning, and use them to make cloth. They tell or write the spinning and weaving sequences, illustrating them by drawings. They weave mats, learn to darn, and weave enough cloth on a weaving-machine to make a tunic for a doll. They draw pictures of sheep and illustrate stories about sheep. They make a balance; also they make the standards used in measuring extension.

STORIES: The Wounded Daisy, in *Open Sesame*, Vol. I.
The Prettiest Doll in the World, by Charles Kingsley,
in *Open Sesame*, Vol. I.

READ: The Little Boy in our House, Wiltse.
Mary had a Little Lamb.
Sleep, Baby, Sleep. (Two stanzas.)

Murillo's Gentle Shepherd and Rosa Bonheur's sheep pictures should be hung in the schoolroom, and used to illustrate the study of the sheep. Other sheep pictures by good artists, and pictures of dogs by Landseer and other painters, should be shown.

III. Kablu's House.

1. THE STORY.

Kablu lived in a house built of logs laid one upon another, the chinks between them filled with moss and clay. It leaned against a great rock, which formed the wall of the house at the back. In front, looking to the east, was the single door. Kablu's house consisted of

but one room. Mats braided of rushes or of bark hung before the door to keep out the wind and rain. The family slept on the floor on beds of sheep- or goat-skin. Here were their clay-baked utensils for cooking, and the dishes from which they ate, also made of clay. About the house on every hand stood high mountains, on the slopes of which grew the wheat, barley, and beans that Kablu and his father planted, and the mountain grass, upon which the goats, sheep, and cattle grazed. Noisy little streams rushed down the mountains, clattering over the sharp edges of the rocks, and dropping here and there into cool still pools where the sheep and cattle might drink. Kablu got up every morning before the sun had risen, and helped his father gather the materials for the fire to the sun-god.

When their morning worship was over, he went out with the sheep upon the mountain side, kept the flock together, and drove them where there was the best pasturage. At night he brought them safely home into the fold, helped his father to hang the mats before the door of the house, and lay down to sleep. Sometimes he left the sheep for a little while, when they were quite safe, and helped his father plough the fields, sow or reap the grain, or make some needed utensil for the house. And meanwhile Nema was helping her mother weave or spin the wool for their clothing, milking the goats and cows, cooking the food, or keeping the house tidy.

Kablu's family all loved one another very much, and for this reason each was glad to help the others in every way he could. Each tried his best to make the home a pleasant place for all of them to live in.

READ: O tell me, Pretty Brooklet, from *Brooks and Brook-Basins*,
Frye, p. 1.

Wynken, Blynken, and Nod, Eugene Field.

SONG: Home, Sweet Home.

The children study the physical environment of Kablu's home, and of their own, especially mountains, streams, the sun, the wind, and the rain.

It may be hard, if there are no mountains in the vicinity, to give the children the idea of a mountain, but electric light towers, high buildings, etc., should be used for comparison, supplemented by pictures to show the proper proportion. Such questions as the following may aid in conveying an idea of the environment of Kablu's home:

How much higher was the mountain than Kablu's house? Than some high building you have seen? How long would it take to reach the top? Do you think he would try to run to the top?

Where did the stream come from?

Did it run faster or slower than the river at home?

Did the banks look like those of the same river?

Could you sail as many boats on it?

How many boats do you think Kablu saw?

Was Kablu glad or sorry to have the stream near?

Why? Was he glad on the night of the storm?

Why was the stream larger then?

Where did all the water come from?

Did Kablu watch the sun and moon very much?

Why? Where did the sun go at night?

Why did Kablu watch the moon?

In connection with the study of rain, the children should read: Rain, by Stevenson, *Child's Garden of Verses*, and Little White Lily, by George Macdonald.

As a basis for the study of winds, the children's attention should be called to the fact that neither Hiawatha nor Kablu had a chimney in his house, thence to the reason why we have chimneys in our houses, and

the principle involved; this subject leading in higher grades into a discussion of the unequal heating of the earth as the cause of winds.

In this connection the children should read *The Wind*, by Stevenson, in *Child's Garden of Verses*.

In connection with the study of wind and rain, growing out of the story of the destruction of Kablu's home (told in *Ten Boys*), the children should be taught, if possible, not to fear storms, but to enjoy their grandeur and to recognize the fact that because of them we have the stable and comfortable homes of to day.

For the sun, read: *Summer Sun*, and *Night and Day*, Stevenson's *Child's Garden of Verses*.

Kablu's food is studied. The life-stories of wheat and beans are used as the basis of the work on these subjects. The story of *Sleeping Beauty* is made an introduction to the wheat sequence, and the wheat seed compared to the *Sleeping Princess*. Other sleeping beauties are studied — cocoons, chrysalides, eggs, buds, minerals.

The wheat story is continued through the story of bread-making. This is followed by the study of the cow, and the sequences of butter and cheese making. The general subject of heat is considered from a practical standpoint — how it is secured and used, what it does. Clay pottery is studied in sequence.

STORIES: How the Indians learned to make clay dishes.

Wiltse, Grandmother Kaolin's Story.

Direction is taught. Copper, clay, and wood are studied, each in its proper sequence. Salt introduces

the subject of crystallization. The homes of the birds and other animals previously studied are considered with reference to their adaptation to purposes of shelter and protection.

READ: A Chill, by Christina Rossetti, in *Open Sesame*, Vol. I.

Seed homes are also studied, and the care of the mother-plant observed in their shape, coloring, and provisions for the nourishment of the seeds.

All the nature-study for this grade lays especial stress upon the seasons as related to vegetable and animal life, clothing, industry, games, etc. The children learn the names and general characteristics of the various seasons, read poems appropriate to each, and bring into school all signs of an approaching or traces of a departing season.

STORIES: The Swallow is a Mason, Second Reader of *Normal Course in Reading*.

L. M. Child, Who Stole the Bird's Nest?

Jack and the Beanstalk (for the rainbow after the storm).

The Wind and the Sun, *Æsop's Fables*.

Alice Cary, Mother Faerie.

Jack the Giant-Killer.

SONGS: Sweet and Low.

The North Wind Doth Blow.

Home, Sweet Home.

READ: Fawcett, Two Kinds of Love.

The Child's World, *Lilliput Lectures*.

Alice Cary, Suppose.

Whittier, Barefoot Boy. (Second stanza.)

Industries studied are farming, building, sheep and cattle raising, making pottery, weaving mats; making bread, butter, cheese, salt, clothing.

Inventions studied are the plough, copper and bronze knives, the churn, rubbing sticks to make fire, clay tiles, mill, jars.

SONGS : There's a Queer Little House, *The Child's Song Book*.
M. Collins, Do You Know How Many Stars?

2. COMPARISON.

Kablu's home is compared with the home of Agoonack and Hiawatha, and with the homes of the children in the room, as to structure, size, form, utility, comfort, difficulty in making, number of persons needed in building it, relation to the environment and climate, number of stories, rooms, doors and windows, pieces of furniture, dishes, etc. Kablu's food is compared with Hiawatha's and with that of the children of the present day, as to how it is obtained, prepared, methods of exchange, standards of measurement and cost. The physical environment of Kablu's home is compared with that of the children's homes. The children determine the type forms for the different houses. They learn to draw the types and pictures of their own houses in some detail. They make the houses of clay, blocks, or other materials. The children trace and copy pictures, made by the teacher, of the two homes and their environment.

SUGGESTED QUESTIONS :—

What did Kablu do to make his home comfortable and cheerful?

Do you have something to do for your home every day? What is it?

Do you do it well?

Are you always obedient? When it is hard as well as when it is easy? When nobody sees you?

Are you really obedient if you obey only when some one sees you?

Why should you be obedient?

Whom should you obey?

How well do you love those at home? What shows how well you love them?

Where do you get your food?

Where does the storekeeper get it?

At what kinds of stores do you get your food?

Why did not Kablu get his food at stores?

How do you buy bread? (By the loaf.) Butter? Cheese? (Scales to show weights.) Flour? Beans? Milk?

3. MEASURE.

The length and width of the house in which each child lives is measured carefully by him, its rooms, doors, windows, etc. He counts the number of stories, rooms, doors, windows, and pieces of furniture in the house.

The children study the pound, the half-pound, the quarter-pound, the ounce, the gallon, the half-gallon, the quart, the pint, and the square foot. They tell what they buy, or what they have seen bought, how it is measured, how much it cost, and from these facts the teacher makes simple problems. The play-houses are made to measurement. The area of floors, walls, roofs, and of the tiles and shingles, is calculated.

4. EXPRESSION.

The children make a model of Kablu's house, side by side with a model of a house of the present day, each with its environment and appropriate furnishings. Clay figures or paper dolls of the members of the family, their pets, and domestic animals, may be added. They tell or write and illustrate all the sequences mentioned in the science-study. They make a churn, plough, tiles,

and jars. They try to kindle a fire as he did. They mark the sunlight on the floor of the schoolroom at morning, noon, and late afternoon, and learn to tell time approximately by it. They make collections of seed homes, shell homes, pictures of furniture, of homes of all kinds, of animals and of plants studied. They play fencing in the fields, and making shelter for the cows and sheep. They picture, act out, and tell the sequences of the different industries and stories.

IV. Kablu's School.

1. THE STORY.

Kablu's school was his home. Here he learned how to plough and sow and reap the grain, how to care for the flocks and herds, to protect them from the wild beasts, to build or repair the house he lived in, to help in building a rude cart or wagon, used for carrying heavy loads, and to be drawn by oxen. In this wagon his father rode when he had to go a long distance. Kablu learned how to kindle a fire by rubbing two dry sticks together, and how to shape and bake the clay to make pottery. His father taught him how to count up to one hundred, so that he could always tell how many sheep were in the flock, and know whether any had strayed away. He could count in moons how old he was, and how old his little sister Nema was. He could tell what time it was by the height of the sun in the sky.

READ: The Moon, in *Open Sesame*, Vol. I.

Jean Ingelow, *Seven Times One*.

Lord Houghton, *Lady Moon*, in *Open Sesame*, Vol. I.

J. W. Riley, *The Man in the Moon*, *Rhymes of Childhood*.

2. COMPARISON.

The children compare their school with Kablu's, as to subjects taught, their usefulness, size of school, the number of hours spent in it each day, etc.

3. MEASURE.

The children count the number of things Kablu learned to do in his school, the number of hours he spent there every day; the number of things they have learned to do in school, the number of hours they spend in school every day, every week.

READ: Little Moments, in *Open Sesame*, Vol. I.

V. Industrial Life.

1. THE STORY.

What Kablu and his father and mother had to do in order to live has been sufficiently treated before under the Home. But in addition to the farming, sheep and cattle raising, felling of trees, house-building, making pottery and tiles, spinning, weaving, sewing, grinding, baking, dairy-work, and mat weaving, should be studied cart building and the making of copper knives. The carts were built by cutting a cross section from the trunk of the tree as long as the cart was to be wide, hollowing out the middle of it to serve as the axle, and leaving the two ends for the wheels. Upon this spool-like contrivance, over the axle, was poised the body of the wagon, made of wickerwork, in which sat the occupant. To a long pole extended from this body were hitched the oxen that drew the cart.

2. COMPARISON.

The industrial life of the Aryans is compared with that of the present day, with a view to bringing out clearly the meaning of farming as an industry. To this end all the observations and experiences of such children as have ever lived or visited on a farm should be utilized.

As specimen questions, the following are suggested :—

Why don't you help your father farm?

Why doesn't he farm?

Where would he have to go if that were his business?

Have you ever been in the country?

What did you see the farmers do?

How many things do you know that they do?

When do they plough the ground for wheat?

What else do they do to the ground?

What do they plant? How?

What tools or machinery are used?

How long does it take for these plants to grow?

What must be done for them while they are growing?

When are they ready to be gathered?

How is it done?

How are they stored?

How long will they last?

How are they sold?

What price is paid?

Where does the seed for next year come from?

How much time does all the work take?

Is the work easy or hard?

What must be done for the animals on the farm — horses, cows, sheep, pigs, chickens?

Do they make their own houses, as do the birds and squirrels?

What are they good for?

Is it worth while for the farmer to take good care of them?

Why should he treat them kindly?

In what does the farmer ride?

In what did Kablu ride?

Which is the better? Why?

Why should a wagon be so large?

How large is it?

What does the farmer's wife do? His sons? His daughters?

Why doesn't the wife spin and weave?

How does she make butter and cheese?

Does she grind her own flour? Who does?

Did you ever watch your mamma bake? What?

What did she do?

Who makes our dishes and knives and forks?

Why don't we?

What work do you do?

What plants and animals have you?

STORY: The Ant and the Cricket, in *Open Sesame*, Vol. I.

3. MEASURE.

The children determine the standards of measurement and value used in buying and selling the various products of the farm.

The following are specimen questions under this head:—

How do we buy eggs?

How much do we pay for them?

Is the price different in summer from that in winter? Why?

How do we buy butter?

What is the cost? The difference in summer and winter?

How is wheat sold?

How do we buy flour?

What is its cost?

What is the cost of chickens?

Is it cheaper to raise them or to buy them?

What is the cost of milk? Of beef? Of pork? Of vegetables?

How do we buy them (by what measure)?

4. NATURE-STUDY.

Such products of the farm as have not before been studied by the children are selected by the teacher for

study. The process of germination and ripening is especially emphasized at this period, the relation of plants to the soil, to light, warmth, moisture, etc. Some of the commoner vegetables and fruits may be studied in the large. Such should be selected as are appropriate to the season and available to the children.

5. EXPRESSION.

Nature-stories are written by the children, illustrated by drawings, and, when appropriate, acted out. Models of the primitive cart and plough are made. Some of the machinery used on a modern farm may be constructed by the children, if not too complicated. A rude windmill, for instance, may easily be made.

SONG: Miller, *The Farmer*.

READ: Longfellow, *The Windmill*. (Selections.)

Krout, *Little Brown Hands*, in *Open Sesame*, Vol. I.

VI. The State.

THE STORY.

At this period the state and the family were one. The nomadic tribe had divided into more or less isolated and independent families, in each of which the father was the head. The modern child at this stage of development has little idea of any authority outside of the home. The conception of state organization need not therefore be introduced until later, when it may advantageously be compared with the political structure of succeeding periods.

VII. Kablu's Church.

1. THE STORY.

In front of the house stands a broad flat stone upon which exactly at sunrise every morning Kablu's father

kindles, by rubbing two dry sticks together, a fire in honor of the sun, the great god of light and fire. The whole family stands about the stone, and, as the flame rises, Kablu's mother and his sister Nema pour upon it the juice of the soma plant, and some of the butter they have made, so that the fire blazes up brighter and hotter, while the father prays to the great sun-god that he may shine upon them all day and make them glad.

2. COMPARISON.

This church of Kablu's is compared with the churches the children know, to bring out the meaning of the church service in its broader outlines. The children, in all these comparisons between the primitive religions and our own, are led, so far as may be, to recognize identity of meaning under differences of form. The forms peculiar to each religion are connected closely with the industrial life of the people; as, in the case of the early Aryans, the sun naturally became their god from its beneficent influences upon vegetation.

Such questions as the following may be used:—

Did Kablu go to church? Why not?

What was his church?

Do we worship the sun?

Who made the sun?

Whom do we worship? When?

Just on Sunday? How?

Why did Kablu think so much of the sun?

What did it do for him?

REFERENCE BOOKS:—

Taylor, *Origin of the Aryans.*

Fiske, *Discovery of America.*

Bunce, *Fairy Tales, their Origin and Meaning.*

Poor, Sanskrit and Kindred Literature.
 Cox, Mythology of the Aryan Nations.
 Lang, Custom and Myth.
 Fiske, Myths and Myth Makers.
 Mason, The Origin of Inventions.
 Mason, Woman's Share in Primitive Culture.
 Chase and Clou, Stories of Industry.
 Jevons, Antiquities of the Prehistoric Aryans.
 Hartland, Science of Fairy Tales.
 Clodd, Childhood and Religion.
 Jane Andrews, Ten Boys.
 Mrs. Jameson, Sacred and Legendary Art.
 Woltman and Woermann, History of Painting.
 Kugler, Handbook of Painting.
 Schrader, Antiquities of the Prehistoric Aryans.
 Morris, The Aryan Race — Origin and Achievement.
 Gummere, Germanic Origins.
 Baring-Gould, Curious Myths of the Middle Ages.
 Field, Field Flowers.
 Gibson, Sharp Eyes.
 Hurl, Child-Life in Art.
 Poulsson, In the Child's World.
 Fraser, The Golden Bough.

PICTURES:—

Troyon, Return to the Farm.
 Wilkie, Sheep Washing.
 Landseer, King Charles Spaniels, The Horse-shoer, Highland Music.

Ferrier, Little Red Riding Hood.
 Watts, Little Red Riding Hood.
 Defregger, Grandfather's Jackknife.
 Madame Lebrun, Mother and Daughter. Louvre, Paris.

Müller,	}	Holy Family.
Raphael,		
Murillo,		
Da Vinci,		
Feuerstein,		
Maratta,		

Steffeck, Queen Louise of Prussia and her Sons.

Sir David Wilkie, The Sheep Washing.

Munier, Animals at the Farm.

Reynolds, Penelope Boothby and Simplicity. National Gallery, London.

Lawrence, Nature.

Bouguereau, Head of Gypsy Child.

Meyer Von Bremen, The Little Rabbit Seller, Household Cares, Going to School, The Pet Bird, The Wounded Lamb.

Murillo, Beggar Boys. Old Pinakothek, Munich.

Brown, Castles in Spain.

Bashkirtseff, The Meeting.

Millais, Pomona.

Vivarini, Angel from painting in Church of Redentore. Venice.

Müller, Joseph and Boy Jesus.

Guido Reni, Joseph and Boy Jesus, from the Holy Family, Rome.

Murillo, Gentle Shepherd. Queen's Gallery, Madrid.

Ross, Bonheur, Sheep, Cows, Horse Fair.

Millet, Angelus, Sower, Gleaners.

Breton, Gleaners.

Bouguereau, The Elder Sister.

Reynolds, Age of Innocence. National Gallery, London.

Knaus, Our Pets.

Renouf, A Helping Hand.

Nicholls, Paul and Florence Dombey.

Raphael, Singing Angels (from Madonna del Baldacchino).

Lawrence, Mrs. Martindale.

F. Goodall, Spinners and Weavers in Egypt.

W. Frank Calderon, Orphans.

P. H. Fisher, The Dog with his Master's Dinner.

Greuze, Girl and Spaniel.

Breton, The Lark.

Ferrier, Zuleika's Pets.

Enslie, Jonquils.

Landelle, The Vision of the Virgin.

Parker, The Good Shepherd.

Reynolds, Miss Frances Harris.

- Reynolds, The Strawberry Girl.
 Reynolds, The Guardian Angel.
 Millais, Lilacs.
 Sperling, At the Fireside.
 Goodall, The Virgin and Child.
 Langee, In Autumn.
 Bouguereau, The Virgin, Jesus, and St. John.
 Bouguereau, Alma Parens.
 Orezzy, Devouring the News.
 Constable, Landscapes.
 Raphael, Madonna and Child. (All, but particularly Madonna of the Chair. Pitti Palace, Florence.)
 Murillo, Children of the Shell, and St. Anthony and Child.
 Defregger, A Child in the Midst.
 Carlo Dolci, Madonna and Child. Corsini Gallery, Rome.
 Andrea del Sarto, Madonnas. Uffizzi Gallery, Florence.
 Botticelli, Madonnas. Borghese Gallery, Rome.
 Knaus, Madonna.
 Müller, Madonnas.
 Guido Reni, Joseph and the Boy Jesus. Louvre, Paris.
 Correggio, Madonna della Scala. Parma.
 Correggio, Boy Blowing Shell. Parma.
 Millet, Woman Churning.
 Millet, Sheep Shearing.
 Maas, The Spinner.
 Van Dyke, Children of Charles I.

RELIEFS SUGGESTED:—

- Donatello, St. John (high relief, Bargello, Florence).
 Della Robbia, Madonna of the Lily. Convent San Marco, Florence.
 Benedetto de Mariano, Madonna and Child.
 Thorwaldsen, Summer and Autumn.

The teacher should consult the lists of books, pictures, statues, etc., given under the preceding periods. Many of them will be found suggestive of material for this period also.

DARIUS, THE PERSIAN BOY.

Grade A 1.

Ages of children, six to seven years.

A. ANALYSIS OF CHARACTER.

The military spirit begins to dawn here (in girls as well as in boys). The instincts of individualism, of self-assertion, quicken in the child. He is at least partially emancipated from the tutelage of his mother, and his father's influence over him strengthens. He likes noise, bright colors, and striking costumes. His desire for notice and affection is so strong that it can be used to overcome the negative side of this instinct. He wants to be noticed, to conquer, to control.

B. ETHICAL AIMS.

These instincts should be utilized by the teacher, turned into healthful channels, that the character may be enriched by them. Individual self-assertion must be tempered and directed through obedience, in which alone coöperation becomes possible. Courage should be turned upon the daily tasks and difficulties of the child. Truthfulness should be accounted the sign and seal of his soldierhood. Martial music and military exercises are freely used in this grade, and in all ways the soldierly ideal is made as inspiring as possible:

C. MATERIAL.

In this grade the work is based on the Persian civilization. The Persian has gained over the earlier Aryan,

in that he knows his physical environment better, and can use it to his purposes. Being released from the constant struggle for a bare subsistence, his energies turn themselves to military conquest, and to the perfecting of industrial arts. Gradually, through the progressive extension of the principles of coöperation and division of labor, the early Aryan family has grown into the city. And it is city life we are now to study — not, as before, the lives of a nomadic tribe and somewhat isolated agricultural family.

Darius, our type-character, belongs to the warrior class. That is, his father is a soldier, and he hopes to be one himself some day. And, therefore, he is, first of all, obedient to the word of command from father, mother, teacher, or whomsoever may be in authority over him. As obedience is the first requisite of a soldier, so is courage the second; and Darius is brave. He does not imagine difficulties or dangers, but goes straight ahead with what he intends to do, sure that he will be able to overcome whatever obstacles lie in his path. And, finally, he is truthful in word and deed, for this also is the quality of a soldier. He is not afraid to speak the exact truth, even when he has done wrong and might feel like shielding himself behind a lie. He is too good a soldier for that. He stands out bravely and confesses the truth, whatever may be the consequences.

The art of Persia embodies the instincts of this stage in civilization. It has a utilitarian basis, but transcends it. It stands in the closest possible relations to environment, reaching out and utilizing for its purposes the flowers, animals, etc., of the country. Persian architecture of this period is daring, large, and sensuous,

typical of the first exuberance of a new power. In this period beauty is conceived as large flowing outlines, rather riotous than severe, and warm, brilliant coloring.

READING: Phœbe Cary, Don't give up.

SONG: There was a Little Girl, *St. Nicholas Song-Book*.

For the embodiment of the ideals by the people themselves see Lübke, *History of Art*; Owen Jones, *Grammar of Ornament*; Perrot and Chipiez, *Art of Persia*.

PICTURES:—

For modern conceptions: Rivière, Daniel in the Lions' Den; Exiles in Babylon, by A. L. O. E.

For ideals of courage, the stories of Daniel in the Lions' Den (pictures by Rivière), and the stories of the Persian heroes, Sohrab and Rustum, may be used; for ideals of obedience and courage, on the positive side, the story of the three exiles in Babylon, who were cast into the fiery furnace, and Æsop's fable of the Boy and the Nettle; on the negative side, that of Xerxes, the man who wanted to chain the sea (Wiltse); for ideas of truthfulness, Washington, and the story of the Persian boy in Whittier's *Child Life in Prose*; for cheerfulness and energy, Æsop's fables of Stone-broth and the Lark and Her Young Ones.

SONG: There, Little Girl, Don't cry, words by J. W. Riley.

The child may be aided to make these ideals definite in his own mind by such questions as the following:—

Do you always tell the truth? Why not?

What makes it hard?

Why should we tell the truth?

Ways of telling a lie: Acting, withholding truth, telling part exaggeration.

Do you obey because some one requires it, or do you make yourself obey? Which is the better? Which is the harder? When you are away from your parents and teachers, can't you think what they would wish you to do, and make yourself obey that?

Of what advantage would it be?

How brave are you? As brave as Daniel? .

What requires most bravery?

What helps you?

How can you show that you are truthful? Brave? Courageous?

I. Appearance.

1. THE STORY.

Darius is a strong, active boy, with blue eyes and light-brown hair. He is straight and tall, and looks you directly in the eye. The muscles of his arms and legs are almost as firm and hard as wood.

In connection with this topic there should be given especial attention to appropriate physical exercises, and a study of the lungs, skin, and muscles.

2. COMPARISON.

The appearance of Darius is compared with that of Hiawatha and of Kablu.

3. MEASURE.

Each child measures the height, girth, length of limb, sight and hearing, of some other child, in feet and inches.

4. EXPRESSION.

The children draw and color the picture of the boy in the room who, they think, most resembles Darius. They draw pictures of Darius.

II. Clothing.

1. THE STORY.

Darius wore a tunic and trousers of leather, and sandals of felt. He had no head-covering. The King wore a tunic of striped purple and white, and trousers

of crimson wool, a purple robe of wool or silk, often embroidered with gold, a covering for the head, and yellow shoes. One servant carried his fan of peacock feathers and another his parasol.

A minute description of the dress of the King, with illustrations, is found in Rawlinson's *Five Great Monarchies*. The children study the primary and secondary colors, shades, and tints, in connection with the process of dyeing.

The children become familiar with the process of leather making, connecting it with the study of tanning in the Hiawatha epoch. They examine machinery used in making different articles of clothing, such as sewing-machines, machinery used in making shoes, pins, buttons.

The children study the silkworm if possible, if not, some other caterpillar, in connection with the study of silk. They study the peacock, gold, and some precious stone.

2. COMPARISON.

The children compare the clothing of Darius with that of the King, and each with their own, in color, material, shape, process of making, durability, etc.

Questions such as the following may aid in bringing out these points:—

Why was there such a difference between Darius and the King in dress?

Do we wear anything made of leather?

Where does it come from?

Who makes it?

• Is it done by hand or by machinery?

Is it all done by one person?

• Did they have machinery in the time of Darius?

3. MEASURE.

They compute the number of persons required to make corresponding articles of their own clothing and of a Persian boy's; the time involved, and the cost. They continue the study of the yard and its measures, and the different pieces of money they are familiar with. (The use of figures and symbols of relations of numbers is taught as needed.)

4. EXPRESSION.

A Persian doll is dressed, and an American doll. All measurements are exactly made, the cost of all material is calculated, and colors are discriminated.

III. Home.

1. THE STORY.

Darius lived in a two-story brick house, whose upper story projected slightly over the lower. Upon the roof was a garden, surrounded by a railing, where Darius often sat or walked in the evening, for where he lived the climate was warmer than that of Kablu's or of Hiawatha's home. From the garden he could look up into the sky where the moon and the stars shone brightly, smell the perfume of the roses and lilies which the breeze brought to him, and hear the sounds of the city life around him.

Babylon was a beautiful city, with its magnificent piles of stone and brick architecture, its palaces and hanging gardens and high altars, its gold and silver and precious stones freely used for decorations, its brilliant tilings and its impressive sculpture.

The teacher should elaborate these suggestions, and show pictures of the Persian palaces, hanging gardens, altars, etc., especially of the Hall of a Hundred Columns, so that the children get a clear idea of the splendor of the Persian civilization.

Rawlinson, *Ancient Monarchies*, Vol. III., and Benjamin, *Story of Persia*, in the Stories of the Nation Series, will afford some useful material.

The occasional cone- or dome-shaped roof and the use of the arch should be noted.

Babylon was surrounded by a thick wall, probably fifty or sixty feet high. This wall was so thick that on its top two rows of houses were built, with a roadway between them, wide enough for a four-horse chariot to turn around. The river Euphrates flowed through the city, and watered the fertile plain that surrounded Babylon. On this plain grew flowers and fruit trees innumerable — roses and lilies, peaches, apples, pears, and cherries. And here also were spread the fields of wheat and barley, of beans and other vegetables. But back of this fertile spot, behind the city, the ground rose suddenly into a high plateau, part of which was a desert. And beyond this rose the mountains, covered with ice and snow, from which were mined the Persian gold, silver, copper, and iron.

The physical environment of the home of Darius is studied through the comparison which the children make with their own—its surface, climate, soil, and productions. The desert, the plateau, the valley, and the river are especially emphasized. Ice and snow are studied, with stress upon forms of crystallization. Following this, and connected also with building stone and clay, may be studied some one of the precious stones

known to the Persians — agate, topaz, emerald, ruby, opal, sapphire, and amethyst.

The conceptions of hemisphere, horizon, and the daily path of the sun are introduced. Stories are told of the constellations: Dipper, Bear, Orion, Pleiades.

The cat is studied as a domestic animal, the camel and horse as beasts of burden, and the lion as the symbol of strength. The single wild rose and the lily are studied in the sequences.

SONG: Schubert, The Wild Rose.

STORIES: A Child to a Rose, from *Open Sesame*, Vol. I.

George Macdonald, Little White Lily.

The Cock and the Jewel, and The Camel, Æsop's Fables. *

2. COMPARISON.

The home of Darius is compared with those of Hiawatha and Kablu, and of the children in the room, as to size, material used, number of rooms, probable cost, furniture, etc. They decide which kind of house they like best, and tell about the nicest house they ever saw. They try to find out what makes a nice home, — whether it is the house itself, its furniture, or the people who live in it. They decide from the weather report which they have made what days have been like those in the country of Darius. They learn terms for size and place.

3. MEASURE.

They measure every part of the house and of the palace which they build. They measure the size of an ordinary brick, as well as of the bricks they make, find out the cost of a load, and the number of loads used in

building some house that they know. They count the number of stars in the constellations they observe, and note how many are large ones, and how many are small.

They have considerable exercise in counting in making estimates of the material for the house. In connection with this topic they study the square foot and cubic inch. With the study of the flowers and fruits they notice the significance of certain numbers, as of the number of petals of the rose, apple, pear, cherry, and lily, cells of ovary, etc. Also significant numbers in the study of the animals, as the number of toes, teeth, etc.

4. EXPRESSION.

The children build a Persian palace, with platforms, steps, and columns, using blocks of the following type forms: square prism, triangular prism, cube, cylinder, and the square and oblong plinths. They make clay bricks, and build the house of Darius with them, showing the roof garden. They build arches of these bricks, and experiment to see which kind of arch is strongest. They build a wall, such as that about Babylon, showing its gates. They show how Cyrus took Babylon.

They cut paper, or make clay figures for winged bulls. They copy designs of Persian ornament, by means of tablets, sticks, rings, and sewing, or by means of colors, and then make designs of their own.

Designs for the ornament work may be found in *The Grammar of Ornament*, by Owen Jones, and the material for reproducing in Prang's Box of Models, No. 1, supplemented by a set of kindergarten rings. The Anchor Stone Building Blocks may also be used for the building.

They make paper patterns of Persian designs conventionalized from the single rose, the leaves of the rose bush, the peach tree, the lily, etc., being careful to make plain in each case which original is followed.

They draw, paint, and mould flowers, fruit, and leaves. They draw and mould, the camel, the horse, and the cat, and cut them out of paper.

IV. Food

1. THE STORY.

Darius ate antelope, partridge, and the flesh of the domestic animals, with cakes of wheat or barley, dates, pears, peaches, apples, cherries, nuts, and berries of various kinds. But, though he had such good food, he had to get it for himself usually, and ate only one meal a day.

The partridge may be studied, if the teacher thinks best. The antelope should be compared with Hiawatha's deer.

Certain typical fruits are studied, those being selected that are available at the season. Their planting, care, production, etc., are especially noted. The product is examined to see what part of the flower has developed it. The acorn is compared with the apple and cherry. The process of preserving is discussed.

2. COMPARISON.

The children compare the food of Darius, the ways of preparing and serving it, its cost, etc., with corresponding facts as to the food of Hiawatha, Kablu, and children of the present day.

3. MEASURE.

The children continue the study of the pound and the standards for dry and liquid measure, in connection with the food. The cost of various fresh fruits at the present season is investigated, and problems made from the facts obtained, such as to find the time, the amount, and cost of each ingredient in making apple, cherry, or peach pie. The difference is calculated between the cost of canning fruit and of buying it canned.

The children read:—

Bryant, The Planting of the Apple Tree. (Selections.)

Keats, The Grasshopper and the Cricket.

M. F. Bass, The Apple-Factory, from *Nature Stories for Young Readers*, pp. 68, 69.

The locust and the caterpillar are studied in relation to fruits, and the fly, as the antithesis to the locust, is considered as a scavenger, as a help to agriculture.

4. EXPRESSION.

The children tell and write the fruit-sequences, illustrating them by drawing, painting, or modelling, or by pictures cut from catalogues and magazines.

V. School.

1. THE STORY.

Darius goes to school in an open field just outside the city gates. His school opens at sunrise, and so he sets out while it is still night, before he has had any breakfast, taking with him his bow and a quiver of arrows, when he is over six years old; a sling and a pocketful of stones, when he is younger. He learns

just three things in this school — to shoot with the bow, to ride, and to speak the truth. The little boys, under six, stand in a row, and learn to throw stones from their slings as far and as straight as they can. Then, while they go for more stones, the bigger boys have a lesson in shooting at a mark, and throwing the javelin from horseback. They do not mount their horses as we should, while they are standing still, but each boy leaps upon the back of a horse, as with hanging bridle he gallops over the field. And when this lesson is over they learn to repeat after their teacher some such sentences as these from Zoroaster, the greatest teacher of Persia. "There are two spirits, the Good and the Base. Choose one of these spirits in thought, in word, and in deed. Be good, not base. The good is holy, true, to be honored through truth, through holy deed. You cannot serve both."

Then the larger boys ride out to hunt, and find their own breakfasts of fruit and nuts, and sleep that night in the fields. Thus the school-day lasts from dawn to sunset.

This is the first appearance in our study of the school as a separate organization and of teaching as a trade or profession in itself. Heretofore the home and industrial life had been the only school for children, but now civilization has become so complex that its functions must be divided. The parents have their own work to do in society, in order to support themselves and their family, and have no time to teach their children all that they should know. Hence, through coöperation, the schoolmaster assumes this task for the parents, who, in return, pay him the money by means of which he lives. The Persian children are here taught the soldierly virtues, truth, courage, and obedience. They are trained to become soldiers for the state.

Outside of this school, Darius learns how to tell the time of day by the length of shadows cast by the sun, to watch the clouds for signs of the weather, to know the different seasons, and the plants and animals belonging to each.

There was one thing Darius did not learn, either in school or outside, and that was to read the queer writing cut into the faces of great stones, which were set up where a great battle had been fought, to keep the record of it; or in the city wall, to tell about the great deeds the King had done. If Darius wished to know what was written on the great stones, he had to get a priest to come and read it for him. The writing did not look much like ours of to-day. If you try to cut our script letters in stone, you will find it very hard to make such rounding lines as we use. The Persians made each letter so that it looked like several arrowheads or wedges set together in different ways.

Illustrations of cuneiform writing should be shown by the teacher, and compared with Hiawatha's picture writing.

2. COMPARISON.

The school of Darius is compared by the children with their own school, and with those of Kablu and Hiawatha, as partially suggested under the head of *The Story*. The underlying identities between all these schools are brought out, along with their differences. The sling and the bow, and arrows are compared with the gun.

3. MEASURE.

- The children measure the time Darius spent in school in one day and the time they spend each day and each week.

4. EXPRESSION.

The children tell the story of what Darius did in school, illustrating by means of drawings, models, etc.

VI. Social Life.

1. THE STORY.

Darius had a friend, a Hebrew boy named Zadoc, who lived in Babylon for a time. Zadoc could not ride nor shoot, but he could tell wonderful stories, about the great sea, which the Persian boys had never seen, and about the destruction of Jerusalem and the captivity of his people. Darius is always a loyal friend to Zadoc, and when the Persian boys say sneeringly that he cannot ride nor shoot as they can, Darius reminds them that if he cannot do these things he can tell more interesting stories than any one else; and so he brings Zadoc into the group of his friends, and makes it pleasant for him among them.

The story of Darius and Zadoc should be paralleled by that of David and Jonathan.

2. COMPARISON.

The children compare their own loyalty in friendship with that of Darius, David, and Jonathan.

The ideal of loyalty to one's friends should be emphasized by every possible means, until the children come to reflect it in their own conduct toward each other in the schoolroom and out.

3. EXPRESSION.

The ideal of loyalty in friendship should be expressed in the conduct of the children toward each other. They should come to despise the practice of "telling on" each

other, and should strive to maintain their friendships by doing each for the others all the friendly offices he can. Stories of friendship are pictured and acted out by the children.

VII. Industrial Life.

1. THE STORY.

Through coöperation and division of labor very many new trades and occupations have arisen in the city. Farming, architecture, pottery making, tanning, spinning, or weaving, we knew in the early Aryan period; but they have been rendered far more efficient by the Persians, and now each constitutes a sufficient business for one man, whereas the early Aryan carried them all on himself. But, aside from these trades, the Persian knows the art of dyeing cloth, of felt making, of making metal ware, and chasing it delicately; he has learned how to quarry stone, to mine for iron and the precious metals and stones, and to make bronze.

The teacher should make a point of the necessity and value of trade in city life, and lead the children to discover how trade arises out of coöperation. The children should learn what is sold in different kinds of stores.

2. COMPARISON.

The industrial occupations and products of Persia are compared with those of Kablu's time and of Hiawatha's, to discover what progress has been made in the conquest of environment, in coöperation, and in division of labor.

3. MEASURE.

The children find out the cost of certain articles which they possess made either of felt or of leather,

the grades of material used, and their relative cost, the time required for making, the number of people employed in the manufacture, etc. Other manufactured products may be investigated in the same way. The time is now to be measured in weeks, days, hours.

4. EXPRESSION.

The children tell and write the sequences for such industrial processes as have been given to them by the teacher, illustrating them as usual, but especially by acting them. They play at quarrying and mining in the sand. They mould pottery, shape tin-foil for metal vessels, and trace patterns on them.

VIII. The State.

1. THE STORY.

The King of the Persians lived in a beautiful palace, and wore beautiful clothing. He was King *because* he was the strongest man and the bravest soldier. Everybody had to do as he said. Darius had to obey his father and his teacher, but his father and his teacher both had to obey the King.

2. COMPARISON.

The children compare the King with Darius, with Hiawatha, as chief of his tribe, with Kablu's father, and with the principal or superintendent of the schools, the mayor, the President, or the highest authority they know, and they decide why there must be some one whom every one else has to obey — why every one should not do as he pleases.

3. EXPRESSION.

The children play king and subject, and see which can be the best king, most loved by his subjects.

IX. The Church.

1. THE STORY.

Darius went to church on a high hill where the only thing that indicated a church was a silver altar, about four feet high, and raised on three broad steps. Upon this altar the sacred fire was kept burning by the priests, whose duty it was. Here Darius would come and pray to the mighty Ormuzd, thanking him for the light of the sun, which had made the fruits to ripen for his food, while the priest cast the juice of the plant soma upon the fire, making it burn more brightly. And then the priest would chant to the people some words of Zoroaster, such as Darius learned at school, bidding them strive to be truthful, brave, and obedient, and Darius would go home. If he had touched any unclean thing he must wash himself three, or four, or even seven times over, before he could go to church, or even go out upon the street where he would be likely to touch anybody else.

2. COMPARISON.

The children compare the church of Darius with that of Hiawatha, of Kablu, of Zadoc, and finally with their own church or Sunday-school. They recognize that Hiawatha, Kablu, Darius, and Zadoc meant the same God by their different names—the same one they themselves know about.

REFERENCE BOOKS:—

Jane Andrews, Ten Boys.
 Benjamin, Story of Persia.
 Ragozin, Story of Media, Babylon, and Persia.
 Benjamin, Persia and the Persians.
 Perrot and Chipiez, The Art of Persia.
 Lübke, The History of Art.
 Fergusson, History of Architecture.
 Franz von Reber, History of Ancient Art.
 Owen Jones, Grammar of Ornament.
 Rawlinson, Five Great Monarchies, Persia, Vol. III.

RELIEFS AND STATUARY SUGGESTED:—

Michael Angelo, David. Academy of Fine Arts, Venice.
 Canova, Lions.
 Donatello, St. John (high relief, Louvre) and Boy Jesus.
 Della Robbia, Six Boys Playing on Trumpets, Four Children
 Dancing. Cathedral Museum, Florence.
 William Hunt, Flight of Time.
 A. Mercie, David.

PICTURES:—

Rivière, Daniel in the Lions' Den.
 A. L. O. E., Exiles in Babylon. (Pictures in the Book.)
 Hoffman, Child Jesus in the Temple.
 Carl Müller, Child Jesus in the Temple.
 Mengelberg, On the Way to Jerusalem.
 Cuyp, Landscapes.
 Cortona, Daniel in the Lions' Den.

*
CLEON, THE GREEK BOY.

Grade B 2.

Ages of children, seven to eight years.

A. ANALYSIS OF CHARACTER.

The character of Cleon is easily recognizable by the experienced teacher, as, in its broader outlines at least,

suggestive of the average child of seven or eight years. His senses are keen, his imagination quick and facile. He is extremely sensitive to his environment, suggestible, restless, impulsive, easily led, for the most part careless and happy, irresponsible, thoughtless of others, and less affectionate than he has previously been, self-willed, though seldom constant in purpose.

B. ETHICAL AIMS.

The object in this grade is to work upon the child through his environment. This is a crucial period in childhood and requires most tactful handling. The vulnerable point in the typical character of the period is his sensitiveness to environment, to impressions from without, the facility with which he is led. His environment is accordingly so ordered as to appeal most strongly to his eager senses and active mind. Through the study of Persian art, his natural love for warm, brilliant, sensuous colors, and large flowing outlines, has been fostered. Now he is ready to appreciate, as having all the stimulus of novelty and the charm of natural outgrowth from this more primitive form, the airy purity of Greek coloring, the severe outlines of Greek sculpture, with its perfect proportioning, its self-contained harmony. The schoolroom should abound in the best specimens obtainable of Greek art, that the children, becoming gradually saturated with its spirit, may be led insensibly to see the truth and purity that alone makes beauty possible. "The True, the Good, and the Beautiful" should be the motto in the school, truth and goodness being for the time considered rather

as means toward beauty of person and character than as ends in themselves.

There is little danger of over-emphasizing, at this stage, the dignity of the body. Personal cleanliness and purity in thought as well as deed may be urged upon this ground. "We become like what we look upon" is an idea which cannot be sufficiently emphasized in the story-work of the grade, as an incentive to companionship with true and pure people and the thinking of pure and good thoughts.

The children are encouraged to tell about deeds which they have seen or of which they have heard that show a beautiful soul, to notice pictures and the real faces of people who look as though they had beautiful souls, to try to show beauty of soul in their own faces, gestures, attitudes, and voices. A key-sentence for the children of this period is "A beautiful behavior is the finest of fine arts." The meaning of this should be taught, and held constantly before them.

EMBODIMENT OF IDEALS:—

The story of Clytie (adapted) should be told to convey the conception of growing like what one looks upon. The story of the Bluebell, as told in *Our Children's Songs*, p. 68, illustrates the same point. Both stories and any others bearing upon the same idea should be used, especially such as that of Washington's Code of Manners and Morals, which he compiled from observation of the best social life in Virginia, and by the aid of which he gained for himself a courtly manner and sound principles of conduct (Irving, *Life of Washington*, Ch. VII.). Wordsworth's *I Wandered Lonely as a Cloud* is appropriate in this connection. For an illustration of the negative side the story of the Gorgon's Head. The story of Circe and the Swine may be used to show the danger of coming to resemble in form what one is in heart.

Hector, Nausicaa, and Galatea are types of the beautiful soul in a beautiful body.

King Midas illustrates selfishness, and Rhœcus, carelessness.

The children read:—

The story part of Lowell's Rhœcus.

The Bluebell.

Wordsworth, I Wandered Lonely as a Cloud.

Circe and the Swine, Odyssey, Bryant's translation.

SONGS: Baby's Skies, *St. Nicholas Song Book*.

Childhood's Gold, *St. Nicholas Song Book*.

Such questions as the following are suggested:—

What did Cleon do to make his soul beautiful?

What do you do?

Are you watching the star and the blue sky?

Are you as selfish as King Midas?

What makes you selfish?

How can you improve?

What will help you?

• What do you do for others?

Are you careless? How?

Do you try to overcome it?

How does a strong body help one to be good?

I. Appearance.

1. THE STORY.

The description of Cleon's personal appearance found in *Ten Boys* may be used, but should be supplemented by the study of the Greek ideals of personal beauty as embodied in the statues of Venus of Milo, the Disk Thrower (Myron), Diana, Mercury, Iris (of the Parthenon), etc.; and in the paintings of Greek subjects by Coomans, Cannucinni, Tadema, Flaxman, Sichel, Raphael, and David.

• The points to be noted under this head are perfection

of form as dependent upon perfect health, which itself depends upon temperance and training; and the Greek standard of personal beauty in special features, forehead, nose, shape of face, etc.

2. COMPARISON.

The children scrutinize each other to detect likenesses and differences between their appearance and that of Cleon and the Greek ideals. They examine the features, the proportion of body, symmetry, strength, coloring. They discuss how such defects as stooping shoulders, flabby muscles, crossed eyes, etc., can be remedied. They compete with each other in feats of strength and grace, in gesture and pose, imitative of the statues studied.

The Greek methods of measuring time are compared with those of the Indians, the early Aryans, the Persians, and of ourselves.

3. MEASURE.

Cleon's age may be calculated by Olympiads. The children calculate their own in the same way.

The story of Kronos is told by the teacher, and the name traced in some of the words we use.

The height, width, girth, and length of limb of each child, the increase of his size and strength due to physical exercise, are measured by himself or by some other child, and the proportions of different parts of the body, especially of the face, comparing those of children and grown people. The shades of coloring in hair, eyes, and complexion are noted.

There should be a great deal of work in color in this grade, particularly in the pure and cheerful colors used by the Greeks. The children should learn the formation of colors and should work with shades, tints, and complementary colors.

A special study is made of the skin (with stress upon the hygiene of bathing), of muscles, and of sense organs. General study of health, its value, its relation to food, exercise, sleep, clothing, air, how secured, cleanliness, environment.

4. EXPRESSION.

The children describe, draw, paint, and mould figures of Cleon, etc. They imitate the poses of famous statues. They draw the poses of other children. They practice exercises for both strength and grace of body, and strive to express desirable characteristics by the expression of their faces.

II. Clothing.

I. THE STORY.

The clothing of Cleon may be described from *Ten Boys*. Additional particulars and numerous pictures may be found in Blumner's *Home Life of the Ancient Greeks*. Greek statuary and pictures from vases are of especial value as sources of information on this subject. The chiton, chlamys, himation, armor, sandals, ornaments, etc., are studied, with reference to the material used, the manner of wearing, and its purpose, the addition to the chiton of the chlamys, and its significance.

The Greek ideals for certain articles of dress as represented in literature and sculpture should be noted — for instance, the helmet of darkness worn by Perseus, the sandals of Mercury, the armor of Achilles.

A cast should be shown of the shield of Achilles. An account of the making of his armor may be read from the *Iliad*.

Flax is studied in sequence as the source of the material for clothing.

The primitive spindles and looms, and other implements connected with the manufacture of flax into linen cloth, should be shown the children. The process of manufacturing the cloth should be studied in sequential order. Other processes connected with the clothing are: the coloring of the cloth, the making of garments, and the cleaning of the clothing.

The spider sequence is reviewed from the Kablu period, and the story of Arachne told in connection with it. Spenser's story of Arachne and of Vulcan may also be read in this connection. With the study of the cleaning of clothes, the story of Nausicaa is appropriate. Selections from the story in Bryant's translation of the *Iliad* and *Odyssey* may be read by the children.

2. COMPARISON.

The clothing of Cleon is compared with that of the children previously studied and then with our own, as to design, material, processes of making, by whom made, cost, coloring, decoration, manner of wearing, difficulty in procuring, the amount of material used, spinning, weaving, sewing. The adaptation of the clothing of each people to the climate in which they lived, to their manner of life, etc., is emphasized.

3. MEASURE.

The children bring in facts about their own clothing, or about that of others in the family, in regard to material, measure used, amount of time for making, cost of making, and wages of those employed, and from these facts problems are made by the teacher. They estimate the time and money spent by each Greek at the baths.

They learn the dollar as measured by the other smaller units, the half-dollar, the quarter-dollar, the dime, nickel, and the cent.

4. EXPRESSION.

The children dress a doll for Cleon and one for his sister, and one each for a boy and girl of the present time. They reproduce and illustrate as before the sequences connected with the clothing. The children make patterns for the clothing that they make for the dolls. They copy beautiful designs in decoration of Greek clothing, then invent some of their own.

III. Home.

1. THE STORY.

The home of Cleon should be considered under at least three main heads: (1) Its Environment: (a) Physical, (b) Artificial. (2) The House, under which may be considered: (a) Its Structure, (b) Furniture and Utensils, (c) Food. (3) Family Life.

The material will be found by consulting the references before mentioned in the text, and Smith's *Dictionary of Greek and Latin Antiquities*. The last named will be found particularly valuable in the work upon the Greek house.

PICTURE: Alma Tadema, Reading Homer.

The following points should be covered: —

(1) ENVIRONMENT.

(a) *Physical*.

- Sea; mountains, Olympus, Parnassus, Pentelicus Hill, slopes, valley, source of streams; Alpheus River; climate; soil; vegetation; animal life, etc.

Story of Orpheus and Eurydice, and of Echo.

PICTURES: —

Aurora, { Guido Reni.
G. Fairman, in Tooke's Pantheon.
Flaxman.

Iris, by Guy Head.

Endymion, by Watts and Guercino.

(b) *Artificial.*

The plan of Athens, Acropolis, position of Parthenon, Erechtheum (Caryatides), road to the sea.

(2) THE HOUSE.

(a) *Structure.*

The relation of the structure of the Greek house to its environment and to social conditions of the time. The stability or permanency of structure, the beauty of the whole and of the parts, the inventions used in building, protection from cold, provisions for cleanliness, eating, rest, reading or writing, the number and arrangement of rooms. Study of the peristylum as the suggestion for the Roman atrium, and of the basilica as preparation for the cathedral. The tiling and wall-painting of the interior. The sacred hearth.

The description of an ideal Greek house, that of Alcinous, should be read from the *Odyssey*.

In connection with the sacred hearth the story of Prometheus may be told.

PICTURE: Erechtheum.

(b) *Furnishing and Utensils.*

Statues, beds, couches, dining tables, benches, chairs, lamps, vases, dishes, portable stoves.

The teacher should show pictures or models of these, and the real thing whenever that can be obtained. She should select the most beautiful and characteristic of these to keep before the children until they are easily recognized. Flaxman's illustrations should be freely used.

Under the foregoing topics there will be a need for the study of various type-forms suggested by nature and applied in inventions and arts; as the ellipsoid from the olive, the ovoid from the fig, the ellipse and oval applied in rose forms, etc.

(c) *Food.*

The kinds of food used by the rich and by the poor, the relation of food to climate, how procured in the first instance and later by Cleon's father, how cooked and served, the relation of food to health.

Read selections from Tennyson's *Lotus Eaters*, and from the story of Circe's Swine and the orchard of Alcimus in the *Odyssey*; The Finding of the Lyre, Lowell. Tell about the nectar and ambrosia of the gods and goddesses. Tell the story of Hebe and Ganymede, of the olive tree, of Persephone, and of the Garden of the Hesperides. Show some reproduction of the statue of Hebe by Canova, or of the one in the Louvre, and pictures of Ceres, Bacchus, and Circe.

(3) FAMILY LIFE.

Customs and manners in the home, relations of parents and children, duties of father, mother, children, slaves; customs in eating, sleeping, bathing, hospitality, and religion.

Greek ideals of certain features of family life are embodied in the stories of Hector and Andromache, of the father and mother of Nausicaa, of Ulysses and his father, and of Ulysses and Telemachus.

2. COMPARISON.

Greek life is compared with that of the Indians, the early Aryans, the Persians, and finally with our own, to show differences in the physical environment, the material comfort and beauty of the home and the mutual helpfulness of family life. Our debt to the Greeks should be shown in as many specific instances as possible, and where the differences observed are not in our favor, the children should learn how to draw upon Greek life still further for the beautifying of their own.

The following are suggestions upon this head : —

How did the Greeks look upon their environment?

What did they think of plants and animals, of the groves and streams, of sun and moon?

(Here should be studied the stories of Rhœcus and the Dryad, of Neptune, Thetis, Naiads, Æolus, Iris, Aurora, Phaeton, Apollo, Atlas, Diana, Hyacinth, Narcissus, Clytie. These stories should be connected with the nature-study.) Compare the Acropolis with the central part of your city. Why did the Athenians care to have a hill in the centre of the city? Compare (in a very general way) the arrangement of streets, public buildings, etc., in the two cities, the height of buildings, towers, or steeples, with that of the Acropolis (five hundred feet), and the streets of Athens with those of their own city as to width, cleanliness, ornamentation, etc.; the provisions for lighting, for protection, and for industrial exchange. Compare the size of Athens with that of their own city by means of their areas in miles, and their populations in round numbers, or, if the numbers are too large, by diagrams.

Houses of the past and of the present should be compared as to material used, size, conveniences, beauty, durability, number, and uses of rooms. Trace the influence of Greek designs on our own by showing examples.

Which do you like better?

Would Greek furniture look well in our homes, or *vice versa*?

Compare a Greek vase with the clay cups of Kablu's time.

Compare the lamps of that time and this, beds, dining-room furniture, dishes, library furniture, chairs.

What food is used by us? Whence does it come? How much is procured at home? How is it obtainable? From what kinds of stores does it come? Did Cleon buy his food at stores? Why? What obstacles have been overcome?

Have the children give facts in their own experience: in raising, cooking, buying, and selling food-materials.

3. MEASURE.

The children learn the number of months in different seasons, the number of days in the month and of hours in the day. They study the thermometer, and learn to read the temperature by it. They study the mile as a whole, the yard as made up of inches. They learn why some fruits are measured by the pound, others by the quart or gallon. They measure for all the expression work (palace and house columns, ornamental designs, etc.), and gain ideas of proportion and fractions, in connection with parts of the house, as floors, columns, tiles, etc.

The children learn the square yard and square foot and cubic inch, and measure the perimeter, the areas of panes of glass, tiles, etc. They estimate the amount of the floor covering, tiling, curtains, hangings, etc., in Cleon's house and in their own. They note how long it takes to build houses of different kinds. They learn the measures used and the cost of various articles used for food, such as honey, grapes, olives, nuts, olive-oil, milk, etc. They estimate the cost of certain articles of furniture, utensils, dishes, etc., both singly and in sets. They learn to use measures of capacity, both liquid and dry.

For nature-study, see the general heads under Physical Environment. Aside from these are studied, by observation and use, the cardinal points of the compass, the succession of day and night and of the seasons, the life-history of clay (used for pottery) and marble (for building), the life-histories of articles used for food, such as olives and grapes, honey, almonds; and besides these, of such insects and birds as were especial favorites of the Greeks; the bee, the grasshopper, and the nightingale (explain by the mocking bird). In connection with the nightingale they study the migration of birds in our climate. The marigold, the sweet pea, sunflower, narcissus, and hyacinth are studied.

All nature-study should be connected, so far as possible, with the Greek myths in regard to the subjects studied. The star-myths should be studied here, those of Argus, the labors of Hercules, etc. Europa is connected with the transfer of our interest from Asia to the new continent. The story of Persephone is apropos of the season-work.

In connection with the flowers should be read Keats's lines on the marigold, "Open afresh your round of starry folds," as far as the line, "On many harps which he has lately strung;" and also those descriptive of sweet peas, both selections from "I stood tip-toe upon a little hill."

In connection with the grasshopper, should be read such selections as Keats's sonnet on the Grasshopper and Cricket, and the following adaptation of Tennyson's *The Grasshopper*.

I.

An insect lithe and strong,

Bowing the seeded summer flowers,

Vaulting on thine airy feet.

Clap thy shielded sides and carol,

Carol clearly, chirrup sweet.

Thou art a mailed warrior, in youth and strength complete.

II.

I would dwell with thee, merry grasshopper,
Thou art so glad and free, and as light as air;
Thou hast no sorrow or tears,
But a short youth, sunny and free.
Carol clearly, bound along,
In thy heart of summer pride,
Pushing the thick roots aside,
Of the swinging flowered grasses,
That brush thee with their silken tresses,
Shooting, singing, ever springing,
In and out the emerald glooms,
Ever leaping, ever singing,
Lighting on the golden blooms.

In this grade the children can begin to make more observations on protective coloring in nature. As a basis for description and other forms of expression the children should know all the standard colors with their shades and tints.

• Selections from *Æsop's Fables* may be read in connection with the nature-study. Jupiter and a Bee, Jupiter and the two Wallets, The Owl and the Grasshopper, Hercules and the Wagoner, The Peasant and the Apple Tree, The Ass and the Grasshopper, The Hawk and the Nightingale, The Ants and the Grasshoppers, are suggested.

In connection with the ventilation of Cleon's house, the children have physiology lessons on the lungs.

4. EXPRESSION.

The children make in sand the surroundings of Cleon's home and of their own. They draw, paint, mould, or describe whatever is studied, using the most appropriate means in each case. They draw a picture of the Acropolis, or model it in clay. They make a sun-dial. They draw, according to scale, a plan of

Cleon's house, and one of a modern house — their own, if possible. They make a Greek play-house (especially the peristyle), and one of modern times, proportioned according to the scale previously made. They lay sticks to show the proportions of the rooms on the ground floor. They make plans for the different kinds of rooms. They draw pictures of their own houses. They make furniture of the proper size and proportions for each house, and draw pictures of each place. They mould, cut, and draw lamps, vases, and dishes. They set the table with dishes, and arrange everything in the houses so as to produce the best effect according to their own ideas. They copy and later invent designs for tiling, mosaic, and frescoing, by means of drawing, painting, and the arrangement of tablets, sticks, and rings.

A box of Prang's Drawing Models, No. 2, and a set of kindergarten rings, tablets, and parquetry are used for the design-work.

They tell or write and illustrate the sequences of growth in the plants and animals used for food ; and represent, in like manner, the processes of cultivation or rearing, preparation for the table, and serving. They picture or make the machinery or implements used.

Songs that may be used are:—

<i>St. Nicholas Song Book,</i>	{ Childhood's Gold. Meadow Folk. Night and Day. The Sing-away Bird.
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READ: Edith Thomas, Talking in their Sleep, *Little Flower Folks*.
 George Cooper, What Robin told, *Little Flower Folks*.
 Ida M. Benham, Little Brown Seeds, *Little Flower Folks*.
 Fawcett, South Wind and the Sun.

SING: E. Smith, Good-by to Summer.

Rice, Shadow Town.

Brahms, The Little Dustman.

Sweet and Low,

The Fairy Artist,

The Pansies,

Pussy Willows,

Sleep, Baby, Sleep,

} *The Child's Song Book,*
by Mary Howliston.

IV. School.

The references are as before, and *Greek Education*, Mahaffy.

1. THE STORY.

The study of Cleon's school should cover the following points: pedagogue, place, studies, utensils (tablet, stylus), time spent in school, and purpose of the school.

The stories of the *Iliad* and the *Odyssey* are studied in their broader outlines, and selections made for reading from Bryant's translation.

For a Greek ideal of school, read about the school taught by Chiron, in Baldwin's *Heroes of the Olden Time*. With this may be connected the story of Pegasus. Parts of Longfellow's Pegasus in Pound may be read.

2. COMPARISON.

Cleon's school is compared with the school of Darius, of Kablu, of Hiawatha, and of children of the present, under all the heads mentioned in The Story, above.

The children learn certain of the commoner Greek words with their meanings, and are able to point them out in English words derived from the Greek words. Such words would be, for instance:

Astron — a star.

Metron — a measure.

Chronos — time.

Pan — all.

Demos — the people.

Petalon — a leaf.

Ge — the earth.

Phonos — a sound.

Grapho — to write.

Polis — a city.

Helios — the sun.

Other words and prefixes and suffixes should be given if the children can take them. Some letters from the Greek alphabet are taught with their Greek names, and a Greek sentence is printed on the board in Greek letters to show the children how Cleon wrote. Certain letters in the Greek alphabet should be compared with the corresponding English letters.

3. MEASURE.

The children find the proportion between the time they spend in school each day and the time they spend in sleep, play, eating, etc. They, each for himself, estimate the cost of the books and other utensils used in school, and find what proportion this cost bears to the weekly income of the father. Each child estimates the cost of his own food, clothing, and school supplies, and compares it with the father's salary.

The teacher may enforce, from these figures, the idea of care for these things as due to the parents who provide them.

The children measure the length, breadth, and height of the schoolroom and the area of its floor. From the weather report kept every day the children at the end of the month find the number of clear, cloudy, and rainy or snowy days, the variation in temperature, and any other significant facts.

4. EXPRESSION.

The children tell, write, draw, and act out the story of Cleon's school. They play being Centaurs. They draw a plan of the schoolroom, locating the positions of various important objects in it. They make the Greek letters that resemble or are identical with the corresponding English letters. They express various

characteristics and ideas through graceful poses and movement.

The children make addresses, using the stories, poems, and quotations they have learned, as subject-matter.

V. The State.

1. THE STORY.

The state should be closely connected with the school in the study of it as it was in the reality. The fact should be emphasized that boys went to school to be trained to be good citizens. Greek ideals of citizenship are studied as embodied in Leonidas, Pericles, Socrates, and Demosthenes, and as expressed by Plato in the *Republic* when prescribing the length of time required to fit a man to hold any public office.

The teacher may read to the children a selection from the speech of Demosthenes On the Crown, that part which relates to the taking of Elatea by Philip of Macedon, beginning, "It was evening. A person came in with a message to the president that Elatea was taken," and ending with the paragraph in which Demosthenes says, "Of all your orators and statesmen, I alone deserted not the patriot's post in the hour of danger." This passage may be found translated on page 274 of the *College Greek Course in English* by W. C. Wilkinson.

The children should understand, so far as possible, that people work together now better than they did in the time of Darius, and because all together they are stronger than any one man, they all are the king, and all together they decide what is to be done. The necessity that some one should decide what is to be done, or that all together the people should decide it, will be recognized by the children, if some game with which they are familiar is used as illustration.

2. COMPARISON.

Some American ideals of statesmanship, such as those embodied in Washington and Lincoln, are compared with the Greek ideals studied, and modern ideas of preparation for office-holding with those of Plato.

Such questions as the following are suggested : —

Who is our king?

Why don't we have one man for king?

Does the President of the United States decide what the people shall do, or do the people decide what is best and tell the President what to do?

Did you ever "count out" to see who shall be "it" when you are playing a game?

Does the child who is "it" make the rest do what he pleases, or does he do what you all have decided upon?

Is the President like the child who is "it"?

Can you do anything to make our city better? What?

Why not wait until you are men and women?

The following questions are suggested : —

What does a policeman do?

Why should there be policemen?

What is the jail for? The city hall? The post-office?

Did the Greeks have a city hall or a post-office?

3. MEASURE.

How long must Cleon wait till he can wear a chlamys? What can he do then that he could not do before? How long will it be before you can vote? The children learn about different kinds of postage-stamps. They measure time by a sun-dial and by a clock. They count and learn the names of the different kinds of plants seen in the park flower-beds, the different kinds of trees. They count the different people they see working for the city.

4. EXPRESSION.

The children draw a picture of the city hall, and of the voting booths, and electric towers. They "act out" the process of voting. They make speeches telling what they can do to become good citizens. They play postman, policeman. They draw pictures of Greek armor; they make shields, spears, and helmets.

The children should get the idea of a policeman as a helper and protector, rather than as a detective or a medium of punishment.

The children learn to sing:—

Flag of the Free.
America.

The children draw and mould the Winged Victory and Minerva. They draw the American eagle, and paint or make a flag.

VI. Social Life.

References as before, and Mahaffy's *Social Life in Greece*.

1. THE STORY.

Children's games (skipping shells, leap-frog, rolling the hoop, running races, playing ball), Olympian games, entertainments in the amphitheatre, the market, the baths, feasts (guests, how seated, dressed, entertained).

The ideal of friendship for this period is embodied in the story of Damon and Pythias, and of Hyacinthus. The ideal for the spirit of the Olympian games is the couplet:—

"Not hate, but glory, made those chiefs contend,
And each brave foe was in his soul a friend."

Descriptions of the entertainment of Ulysses in various places should be read from the *Odyssey*.

2. COMPARISON.

The social life of Cleon's age is compared with our own and with that of Darius, Kablu, and Hiawatha as to

the forms which it takes, its games, customs, its ideas of hospitality, etc. The children compare their friendships with that of Damon and Pythias. They compare their own games and social customs with those of the Greeks.

The old Greek practice of "guest friendship" should be compared with our customs.

The Greek way of measuring time by Olympiads should be emphasized, as showing how much more important they considered athletic contests than we do now. (The relation of the Olympian games to religion should be shown.)

3. MEASURE.

The children estimate the number required for different modern games. They count up how much it costs to give a party, the number of people needed to help furnish the food, clothing, etc., and the time necessary to prepare for it. They find out also how much a party-dress or a suit of clothes will cost.

In discussing the preparations for a party, party manners and spirit should be emphasized, and the children led to feel the obligation of a host or hostess to make the guests have a pleasant time, forgetting his or her personal preferences. What the guests should do to help the host or hostess, and to make a good time for everybody, may also be discussed, and the children's ideas brought out. They may be asked to think about what makes a good party, and assisted, if necessary, to the idea of coöperation. The various games may be discussed in like manner, and the same idea disclosed,

The children determine the seasons for playing various games, and decide why each season is appropriate to the games played then. In connection with the music at Greek feasts, they measure the length and comparative size of strings and pipes in different musical instruments.

4. EXPRESSION.

The children "act out" the Greek children's games, the Olympian games, and feast at the house of Cleon. They tell and write the stories of these events, illustrating them with pictures and models. They make an Æolian harp in a window of the schoolroom, a lyre and a whistle (in lieu of a flute). They make chariots, draw or cut pictures to represent games and processions. They act out stories they have learned. They tell or act out stories of their own. They copy pictures showing social life as found on vases, in Flaxman's pictures and others (those in simple outlines), then make drawings showing pictures of modern social life.

VII. Industrial Life.

References as before.

1. THE STORY.

Agriculture, sheep-raising, spinning, weaving, coloring, quarrying, metal-working (armor), building, making chariots, pottery, sculpture, painting.

Ideal pictures of the occupations of the time are found in:—●

The *Iliad*: The description of the pictures on the shield of Achilles.

The *Odyssey*: The story of Nausicaa (occupations in her father's palace). Penelope's weaving. The father of Ulysses in his garden.

2. COMPARISON.

The children compare the industries, inventions, and methods of exchange of Cleon's age with those of Hiawatha's, Kablu's, Darius's, and our own. They find out what industries are represented in the schoolroom and what at home.

3. MEASURE.

The contents of amphoræ are estimated. Greek and American money studied. All articles made in the expression work are exactly proportioned.

4. EXPRESSION.

The children make models of and draw armor, vases, columns, and lamps. They describe or picture the different industries they are familiar with, and name the tools, implements, and standards employed.

READ: Ulysses at the palace of Alcinous, from Bryant's, Butcher and Lang's, or Palmer's, translation of the *Odyssey*.

VIII. The Church.

References as before, and Owen Jones's *Grammar of Ornament*.

1. THE STORY.

Religious processions and ceremonies in the temples. The Parthenon. The Oracles. Worship of nature; nymphs, dryads, naiads, etc. Accounts of some of the gods and goddesses, showing pictures and statues. Worship at home.

The Parthenon should be made the subject of especial study, its position on the Acropolis noted, and pictures shown of its exterior and interior, of its statuary, etc. In connection with the study of the temples, the work of Phidias should be studied.

2. COMPARISON.

Such questions as the following may be asked:—

What did the Greeks worship? Why? Did it make them better?

What do we worship? Does it make us better?

Do we worship in temples? In what? When? In our homes?

Is Sunday the only day to worship and be good?

3. MEASURE.

From the real dimensions of temples, columns, statues, etc., problems are made by the teacher. The children compare the Parthenon as to size, proportion, etc., with some well-known church of their own city.

4. EXPRESSION.

The children make the Parthenon with blocks or other material. They make drawings of it. They draw columns of the different orders, statues, and ornamental designs. They paint designs in typical Greek colors, and reproduce them by means of tablets, sticks, and rings.

REFERENCE BOOKS: —

- Jane Andrews, *Ten Boys*.
- Blünnner, *Home Life of the Ancient Greeks*.
- Smith, *Dictionary of Greek and Roman Antiquities*.
- Guhl and Koner, *Greeks and Romans*.
- Wilkinson, *Preparatory and College Greek Course in English*.
- Bryant, *Translation of the Iliad and Odyssey*.
- Bulfinch, *Age of Fable*.
- Gayley, *Classic Myths*.
- Guerber, *Myths of Greece and Rome*.
- Hawthorne, *Wonder Book*.
- Hawthorne, *Tanglewood Tales*.
- Adler, *Moral Instruction of Children*.
- Morgan, *Ancient Society of Greece*.
- Lübke, *History of Art*.
- Fergusson, *History of Art*.
- Pausanias, *Description of Greece*.
- Harrison, *Mythology and Monuments of Ancient Athens*.

Mahaffy, Social Life in Greece.
 Mahaffy, Rambles and Studies in Greece.
 Mahaffy, Greek Education.
 Mahaffy, A History of Greek Literature.
 Perrot and Chipiez, History of Art.
 Schömann, The Antiquities of Greece.
 Lloyd's Age of Pericles.
 Plutarch's Lives.
 Becker, Charicles.
 Von Reber, History of Ancient Art.
 Von Falke, History of Art.
 Winckelmann, History of Ancient Art.
 Gardner and Jevons, Manual of Greek Antiquities.
 Gardner, New Chapters in Greek History.
 Baldwin, Old Greek Stories.
 Baldwin, Stories of the Golden Age.
 Lamb, Adventures of Ulysses.
 Hanson, Stories from Homer, Simply Told.
 Church, Stories from Homer.
 Church, Stories from the Greek Tragedians.
 Church, Stories from the Greek Comedians.
 Church, Greek Life and Story.
 Church, Three Greek Children.
 Montgomery, Tales of Ancient Troy.
 Stuart, Antiquities of Athens.
 F. D. Sherman, Little Folk Lyrics.
 Jacobs, The Book of Wonder Voyages.

The following casts, statues, and paintings may be used : —

Apollo Belvedere. Vatican, Rome.
 Minerva. Of Vellitri, in the Louvre.
 Diana. Of Versailles, in the Louvre.
 Zeus. Vatican.
 Venus of Milo. Louvre, Paris.
 Mercury. Bologna, Florence.
 Guido Reni, Aurora. Rospigliosi Palace, Rome.
 Niobe. Vatican. Son shielding sister, from same group, Naples.
 Sleeping Ariadne. Vatican.

Raphael, Apollo and the Muses. Vatican.
 Nike of Paionios. (Nike tying sandal.)
 Nike of Samothrace. (Nike placing trophy.)
 Iris (from the Parthenon).
 • Praxiteles, Hermes. (Head.)
 Caryatid (from Erechtheum).
 Romano, Apollo and the Muses.
 Canova, Hebe. Museum, Berlin.
 Phidias, Greek Water Carriers.
 David, Paris and Helen.
 Glaize, Athenian Fugitives.
 Tadema, Sappho.

PICTURES that may be used are:—

Corot, Orpheus.
 Beyschlag, Orpheus and Eurydice.
 Watts, Orpheus and Eurydice.
 Sichel, Pandora.
 Ganymede and the Eagle, from the National Museum, Naples.
 Bernini, Apollo and Daphne. Borghese Palace, Rome.
 • Raphael, Hours.
 Raphael, Days of the Week (or Seasons). Rome.
 Schobelt, Abduction of Persephone.
 Leighton, Return of Persephone.
 Maignan, Parting of Hector and Andromache.
 Rivière, Circe and the Swine.
 Pictures in Von Falke's Greece and Rome.

ADDITIONAL PICTURES AND STATUARY:—

Antinous. Vatican, Rome.
 Myron, Quoit Thrower.
 Armore Greco. Vatican.
 Coomans, Painting, Sculpture, Music, Poetry.
 Flaxman, Illustrations of the Iliad and Odyssey.
 Infant Hercules. Berlin.
 Alma Tadema, A Kiss.
 • Cellini, Perseus.

Nike. National Museum, Naples.
Narcissus. National Museum, Naples.
Clytie. British Museum.
Thorwaldsen, Ganymede.
Crawford, Ganymede and Hebe. Boston Museum.
Bates, Psyche.
Claude Lorraine, Landscapes.
Turner, Landscapes.
Lawrence, Nature, and Miss Murray.

HORATIUS, THE ROMAN BOY.

Grade A 2.

Ages of children, eight to nine years.

A. ANALYSIS OF CHARACTER.

The facile, impressionable, unstable Greek character has become sobered, steadied, and somewhat materialized in this grade. The teacher will find the characters of the children beginning to "set" somewhat. They are more self-determined than before, and the instinct for domination is strong. The careless tossings and driftings of the Greek period have brought the individual into contact with the law of nature and of society. As he has grown, through experience, familiar with these laws, he has come, little by little, to realize the power to be gained by alliance with them. He co-operates with others for the sake of what he will gain for himself. Power, ability, success, become his ideals, displacing to some extent the ideal of beauty. He submits to law as the embodiment of power, is obedient to authority, and overbearing to those weaker than him.

self. He is intensely patriotic. He is ambitious to impress himself in some way upon others, usually by some deed of heroism. Or his ambition may assume a somewhat more utilitarian form, and he may think and talk about being rich or politically powerful. But in some form or other, his ideals will be of mastery, domination, success.

B. ETHICAL IDEALS.

These first strong stirrings of the natural instincts for power are not by any means to be repressed by the teacher; but all the work of the grade is designed to stimulate and make them more intelligent, hence more effective. It aims to teach how much is gained through coöperation, between man and nature, and between man and man. The child learns that success depends upon individual effort not more than upon an alliance with law and coöperation with others, so that he becomes law-abiding, and unwilling to oppress others though he is strong enough to do so. Order and system, manliness, self-control, and honor, individual responsibility, and patriotism are conceptions which will repay especial cultivation at this point, as the soil is ready for them and all conditions are favorable. Tales of heroism in its larger and more picturesque manifestations should be freely used, to enlarge the children's ideas of what success really means. They will hardly be able at this stage to appreciate the quality in its finer and more obscure aspects; but such heroes as Horatius and Curtius will appeal to them strongly. The central idea for this grade is "Power through Law." Honesty, helpfulness, and patriotism are terms by which the children may grasp the idea.

C. MATERIAL.

The stories of Roman heroes should be freely used for their ethical bearings: for patriotism, those of Horatius, Curtius, and Regulus; for personal integrity and regard for law, as positive instances, Regulus, Fabricius, Brutus the first consul, and the consul Manlius, who ordered his son to be beheaded for a violation of the law; as a negative instance, Tarpeia. Cæsar may be used as the ideal of military glory.

These ideals should be shown as (a) embodied in Roman art, as in the Relief of Curtius in the Villa Borghese, and (b) embodied in modern art, as in Flaxman's pictures in Church's *Stories of Livy*.

READ: Macaulay, Horatius.

Holmes, Flower of Liberty.

SING: America.

Handel, See the Conquering Hero Comes.

Photographs of the Tarpeian Rock, Forum, and other places mentioned should be shown. The children study the American flag, and make one according to measurement.

Such questions as the following may be asked:—

Have we ever had any one in our country as brave as Horatius who kept the bridge? A man with as high a regard for law as Brutus? A man who was strong enough to do what was best for the country without regard to what would happen to him, like Regulus?

(Tell stories from American history.)

Are you trying as hard as Horatius to be brave and to become a good citizen?

Would you make a good soldier?

Why do we need soldiers?

Do we need them now? Why?

Do soldiers ever fight things instead of people?

What shows how brave you are?

Are you bravest alone or with some one?

• What kinds of bravery are there?

Will you ever make a good citizen? Why? How are you preparing?

Is it just as well to wait until you grow up?

Can you walk as a soldier does? Endure? Control yourself?

(Show pictures of heroes and heroic scenes.)

I. Appearance.

1. THE STORY.

The head of the young Augustus should be used to show the ideal Roman type of face. This may be supplemented by the description of Horatius in *Ten Boys*.

The dignity, firmness, self-control, and nobility shown in the face of the young Augustus should be noted; and the connection shown between the typical Roman face and the Roman life and character.

As the Romans had many portrait-statues, pictures of their great men may be shown the children. As the ideal historic representation of a later period the Antinous may be used.

The baths of Caracalla and others are studied, and the matter of cleanliness and the training of the body discussed. The teacher tells the children something about the difference between the golden age of Rome, and the time when it fell, and assigns as the great reason for this difference the prevalent gluttony and wrong living at the latter time, resulting in loss of military vigor. The relation of one's habit of life to health and strength is discussed, with emphasis upon

temperance and self-control. The children study the hair and the nails, with reference to the care of them.

2. COMPARISON.

The face of the young Augustus should be compared with those of Cleon, of Darius, Kablu, and Hiawatha, to bring out the differences.

3. MEASURE.

Roman ways of measuring time are learned and compared with our own. The meaning of our names for months is learned. Measuring the growth of the body at regular intervals should be continued in this grade. Determine proportions of the body, as hand and foot to height.

4. EXPRESSION.

Military exercises. Practice in the carriage of the body, pose, gesture, facial expression. Drawings of the children in characteristic pose. The children learn to express numbers by the Roman notation as well as in the Arabic.

In this connection read Longfellow's *The Poet's Calendar*, and the description of the Procession of the Hours in Scene IV. of Shelley's *Prometheus Unbound*, also Phaeton, in Ovid's *Metamorphoses*.

Show also the pictures of Raphael's *Hours and Days of the Week*; and Guido Reni's *Aurora*.

READ the Story of Antinous and Hadrian, from Rydberg's *Roman Days*, and Mrs. Browning, *A Portrait*.

II. Clothing.

1. THE STORY.

Clothing proper to certain ages, ranks, occupations. Adaptation to environment and habits of life. Orna-

ments and decorations, arms and implements of war, precious stones known then and now.

The ideal of the time shown in the portrait statues. Ideal costume as shown by an artist of later time, as, for example, by Le Roux, School of the Vestal Virgins and the Vestal Tuccia.

Study of cotton, ivory, shellfish, cochineal, and rock-lichen (source of purple dye) as sources of material and coloring used in connection with making clothing.

Wool and flax, having been studied in grades below, are not studied here. The children should learn the processes of manufacture, occupations, and inventions, growing out of the study of clothing. The manufacture of felt and leather should be reviewed here. In connection with the process of dyeing there should be a study of complementary and tertiary colors.

2. COMPARISON.

The clothing of Horatius is compared with that of the periods previously studied and with that of the present as to design, comfort, material, color, difficulty in obtaining material, making, trimming, durability, cleanliness, extent of wardrobe, its relation to the climate, to the environment, its æsthetic quality (compare pictures of Roman costumes with fashion book of the present), the machinery used and the division of labor. What were the standards of measuring then? What now?

What obstacles were overcome then? What since? Inventions used then and now? What provision is made for the clothing of animals? How do we take advantage of it?

3. MEASURE.

Problems are made and economic conclusions drawn from the comparison of different facts brought in by the children as to their own clothing; the amount of material and trimmings, how measured; the cost of garments of different material (compare in cost and length of time worn); time given to making and mending; cost of ready-made and home-made garments. The children learn the origin of the standards used by the Romans which correspond most nearly with our inch, foot, and yard. They study the dollar as made up of cents, and the gross. The relation of price to quality of material should be noted and practical suggestions made in regard to buying.

4. EXPRESSION.

Describe, draw, paint, cut, and sew garments like those of Horatius' time and of the present, measuring everything made. Design decorations for the garments in flax, wheat, sticks, rings, etc., and by drawing and painting. Dress dolls for Horatius, his sister, and a boy and girl of the present time. Draw or make the implements used in the different processes studied. Draw or describe the sequences of the processes. Put in the scrap-book pictures of machinery used now for these processes, pictures showing clothing at the time of Horatius, and some cut from fashion magazines of the present time.

READ: Lovejoy, *Nature in Verse*; Susie E. Kennedy, *Miss Willow*.
Whittier, *Child Life in Poetry*, October had a Party, and
Jack in the Pulpit.

Miss Palmer, *Miss Snowflake's Party*.

SING: *A Million Little Diamonds*, *St. Nicholas Song Book*.

III. Home.

1. THE STORY.

The home should be considered under three heads: (1) Environment, (a) Physical, (b) Artificial. (2) The House, (a) Structure, (b) Furniture, etc., (c) Food. (3) Family Life.

(1) ENVIRONMENT.

(a) *Physical.*

The following points should be noted: The mountains, plains, Tiber, seven hills, climate, heat of sun at midday, length of days at different seasons, changes in temperature for different seasons; kinds of soil, uses; minerals: marble, tufa, clay, salt, sulphur; animals: wolf, eagle, goat, dog, shells, corals; plants: chestnut, poplar, oak, laurel, ivy, clematis, daffodil, poppy, violet, trefoil; heavenly bodies.

Pliny's letter to Domitius Apollinarus (*Epistle* v. 6) describes the physical environment of his Tuscan villa.

READ: Longfellow, Fiftieth Birthday of Agassiz.

Jane Taylor, The Violet.

(b) *Artificial.*

Pictures should be shown of Ancient Rome and the Rome of to-day. The following points may be noted: Plan of the city (general features); Forum: golden mile-stone, Basilica Julia; Temples of Saturn, Castor and Pollux, Vesta; Tablinium, Arch of Septimus Severus, Rostrum, Sacred Way, Cæsar's Portico, Senate-house, Colosseum, Arches of Constantine and Titus, Appian Way, Baths of Caracalla, Mamertine Prison,

Cloaca Maxima, Tarpeian Rock, Palatine Hill, aqueducts, fountains.

(2) THE HOUSE.

(a) *Structure.*

The ideal historical structure may be shown by the description of Pliny's Laurentian Villa or by descriptions or pictures of Pompeian houses.

Plan of a house, portico, peristyle, atrium, hearth, etc. Adaptation of house to environment, climate, life of the people; beauty of the whole and of parts; provision for light, heat, air, water, cleanliness, rest.

(b) *Furniture and Utensils.*

Beds, couches, seats, tables, chests, cabinets, lamps, tableware, sun-dials, hour-glasses (hours of different lengths at different times of the year), tablecloths and napkins, lights. Trace Greek influence on Roman in regard to furniture, etc. Try to have the children distinguish different typical shapes of furniture and dishes.

(c) *Food.*

The ideal in literature may be found in the story of Ceres, the ideal historical in Pliny's letter. Selected lines from Horace containing a description of a Roman dinner.

The staple foods. Number and time of meals. Number of courses and varieties of food used at dinner. Religious features.

(3) FAMILY LIFE.

An ideal of family ties as embodied in literature is Virgil's description of Æneas taking his father from Troy. For an ideal historical presentation, Cornelia

and her jewels and the story of Virginia may be used. Showing the ideal of the present, Longfellow's *Children's Hour*, or Eugene Field's poems for children and Alice Carey's *An Order for a Picture*. Stories from Felix Adler's *Moral Instruction of Children* may be used.

Family and individual games, the pride of family, training given by the mother at home, later education also often at home, subordination of children, filial love and honor.

Compare the Roman house as to its general plan, material, and beauty, provision for light, heat, water, air, cleanliness, and rest, with the homes of the children in school, and also with the home of Cleon and others of previous periods. Compare atrium, tablinium, peristylum with rooms of the present time that correspond to these. Try to have the children form a conception of a typical Roman house, and see something of the reason for its plan in the life and environment of the people. Then show how ours are adapted to our life and environment. Many beautiful features of the Roman house have been adopted by us in a modified form: roof gardens, doors, flooring (bricks, tiles, stones, mosaics). See J. H. Parker on Mosaics.

Compare the furniture and utensils used by the Romans with those both of earlier times and of the present. Trace the influence of the Greek upon the Roman. Typical shapes should be presented till the origin can be distinguished.

Some of the most important principles of art may be learned here, such, for instance, as symmetry, proportion, and repose.

READ: *Æneid* (Book II, l. 957).

Evangeline. (Leaving Grandpré.)

2. COMPARISON.

Compare the different kinds of food and the manner of serving, both in the Roman period and now. Compare city life with farm life that children may know the sources of supply of some of the most important articles of food.

Compare the amphitheatres of the Greeks with the Colosseum, Circus Maximus, and amphitheatres of the Romans. Compare with our theatres. Temple of Saturn with our banks. Where was their post-office? Compare Roman forum, Greek agora, and our markets. Compare Roman bridges, roads, and mile-stones with ours. Palaces and our houses, fountains, monuments, parks; Senate and Council Chamber; aqueducts and water mains — force from slope and force from machinery; Tiber with local rivers, breadth, color of water, banks, motion of water, where the water comes from, where it goes. Kinds of soil: sand, gravel, clay, loam. Uses: uses of tufa and clay at Rome. Common trees found here. Did they have stores, banks, post-offices? Their use? Compare means of communication then and now. How did the Romans send letters? What have we that they had not? Roman wall bounded Rome; what wall bounds your city? What bounds the school?

Compare your nearest river with the Tiber, compare sources (lake and spring). Could there be a larger island in the Tiber? Compare hills of Rome with the surroundings of your city. Climate and winds. Kinds of soil the children see compared with tufa, etc.; its use. Compare trees, vegetables, animals, minerals. Compare the way the Romans used rivers and hills,

with our use of rivers and structure of land. Uses of the land around Rome; products, effects of climate. Value of position on the river and on the hills for these products. Compare products, etc., with ours. Compare overflow of Tiber and results with measures taken to prevent overflow here. Use of sewers. Why a difference in the trees? (Relation of climate to animal and vegetable life shown.)

3. MEASURE.

The children study the square yard, the rod, and the square rod. They begin the study of the mile. They find the distance from the school-building to the market, nearest opera house, city hall, soldiers' monument, nearest churches, prison, river, island. Perimeter of block, of cellars, yard; width of street; number of days, bright, cloudy, or rainy, in a month; length of hill, shadows at different times of the day and on different days; growth of birds, plants, vines, vegetables; amount of food produced on home trees, relation of trees to insects, of food consumed by different animals at children's homes, number of stores of different kinds within the immediate neighborhood, time between street-cars, time for street-cars to go one mile. Perimeter of a triangular block. Hours stores are open, number of people employed in stores and for delivery wagons. Compare the size of the Colosseum with that of some auditorium, length of Roman aqueducts with city water mains, the fountain of Trevi with the fountain in the park, length of time the paving of a Roman street has lasted with the time since ours has been laid, size of Roman chariots with our carriages. Estimate

the cost of keeping certain pets, of entertainments the children have recently attended. How long must a newsboy work to buy a ticket to some entertainment? Why does it cost money? How many people minister to your pleasure if you go to the park? To other places for pleasure? To procure food? How many people take care of parks? Street cars? (Select other things from the experience of the children.) How many children in a given block? How many families? How do they need to coöperate in the winter? In other seasons? What can they enjoy together? What causes suffering among them? (One of the strong teaching points in this period is the amount that is accomplished by system, order, and coöperation. Through the measuring this can be brought home to the children.) Show how, through coöperation, measurement, and inventions, distance is not such an obstacle as it used to be, and how there is more freedom.

The children bring in number-facts in regard to their own homes. Kind, number, and size of rooms; cost of different materials, of window-glass, of stairways, tiling, papering, painting, of providing bath-rooms, arrangements for heating, lighting, water. Compare the cost of the public baths in Rome with the present, of beautiful floors then and now. Second story of house built because of increase in value of land. Compare dimensions of Greek, Roman, and present-day houses; also the number of rooms. Cost of furniture of different kinds and grades. How purchased or measured? Why, differences in the cost? Sequence and source of some article of furniture or of some utensil to show the num-

ber of people required, the difficulty of obtaining, number of progressive steps, hours of labor, use of machinery, number of industries, place where they are carried on, distance manufactures are carried. Make the model house and furniture to measurements. Observe proportion between size of house and furniture. Measure size of house, of rooms, of yard. Find area and perimeter. Measure by comparison different kinds of lights, candle, kerosene, gas, electricity.

Have the children bring the facts on length of time it takes to cook different kinds of food; the amounts necessary for a meal for a certain number of people; the cost of food of different kinds, how measured and sold (they use the bushel, pound, ounce, and cubic inch as measures); from what stores obtainable, etc. Length of time required for producing, procuring, preserving; what preparation is necessary before serving; cost in money, time, and strength; utensils required. Capacity, durability, and cost of kitchen utensils, and of farming implements.

Of course these lines of suggestions cannot all be followed out. The teacher must select such as she deems most profitable.

Nature-Study.

Many subjects for nature-study, found under the head of Physical Environment, will not be repeated here.

Study of water-supply, science of piping. Sequence of brickwork, of material used for mosaic floors, curtains, etc. Study the ivy, the poppy, and the violet. Study petroleum (lighting) and mica (windows). In connection with the midday siesta of the Romans, study the daily motion of the sun, shadows, variation of heat.

at different parts of the day ; length of days at different seasons. Study the changes in structure and life of one animal and one plant as due to climate, and the change in life, animal and vegetable, at different seasons. *

General study of the use of foods ; kinds of foods, animal, vegetable, and mineral. Kinds of food used by the Romans compared with ours. Why is there a difference ? Study of the stomach. Relation of food to health. Let the teacher give the facts of the proportion of elements in different foods (experiments). Evaporation in cooking and elsewhere.

The various foods used by the Romans are studied in sequence of growth, preparation, etc. Wheat ; process of cultivation, tools and implements. Preparation of bread — private and public guilds. Cakes, pastry and confectionery. Vegetables : beans, peas, lentils, cabbages, beets, turnips, radishes, carrots, asparagus, onions, melons, cucumbers, lettuce, mustard, mint. Gardens, when and how made ? What raised ? Fruits : apples, pears, plums, quinces, olives, grapes. Make a study of one of each class. Show what the part valuable to us means to the plant. Study under sequence of life-history. Select those best for the season in which the work is being carried on. Meats : domestic fowls and game. Compare with those used in former periods. Study salt. Care of horses, cows, sheep ; our treatment of them.

4. EXPRESSION.

Model in sand the physical environment of Rome, showing the seven hills, the Tiber, etc. In the same way, show the physical environment of their own city.

Model or draw the Colosseum. Model arches, columns, etc., in their proper proportions. Draw to a scale the block in which the schoolhouse stands, also a business block in the city. Put in houses, stores, vacant lots, and buildings of different kinds. Indicate by coloring or otherwise the proportion of dwelling-houses in the block to places of business, and also the proportion of different kinds of business. Make drawings of buildings, monuments, arches, of Rome and the pupils' own city. Make pictures to show scenes in both cities; to show the children's own experiences in the city; to show a sequence of experiences in starting from home and going by boat or street-cars and bridge to some park or place of recreation, experiences there, and return. Picture occupations seen on the way.

The children make a typical Roman house complete with windows of mica, window-shutters, furniture, etc. They also construct a modern house. They draw the ground plans of these and also one of the schoolroom to a given scale. They describe these plans, using cardinal points. They learn some of the more common Latin words used in connection with the study of the house, and other words embodied in our language easily understood by the children. They copy beautiful designs of furniture, both Roman and modern. They draw and make utensils of different kinds.

They paint, draw, and mould objects used for food. They play having meals of different kinds, showing arrangement for the table, order of courses, preparation of meals, washing of dishes. The children arrange for a meal in which there shall be the maximum of nutriment. They draw or act out the story of Ceres.

The color study should be continued, complementary colors should be taught, and the rich Roman coloring should be shown.

In connection with the study of animals, read Longfellow's *The Birds of Killingsworth* and Sewall's *Black Beauty*. Apropos of the mineral study and crystallization the teacher should tell the story of Neith from Ruskin's *Ethics of the Dust*. Here also may be read Jack Frost, from the Normal Fourth Reader, and the Winter Prelude in Lowell's *Vision of Sir Launfal*. With the study of the river, the baths, etc., read "Oh, tell me, pretty river," also from the Normal Fourth Reader, Lowell's *Fountain*, and Mrs. Whitney's *The Alder by the River*.

In connection with the ivy should be read Dickens's *Ivy Green*, and apropos of the violet, Lucy Larcom's *Calling the Violet*.

SING: Chopin, *Berceuse*. (The children hum the melody.)

Schumann, *Slumber Song*.

Open your Eyes, my Pansy Sweet, C. B. Hubbard's book
of *Kindergarten Songs*.

The Ivy Green.

IV. The School.

1. THE STORY.

The ideal of Roman education is thus expressed by Cicero: "The children of the Romans are brought up that they may some time be useful to the country, and hence should be taught the nature of the state and the regulations of our forefathers. Our country has borne and educated us on that condition -- that we consecrate to its service the best powers of our spirit, talent, and understanding; therefore we must learn the art through which we can serve the state, for I hold that to be the greatest wisdom and the highest virtue."

Read selections from Juvenal's *Satire X*. (from "The child, with whom" -- ending "Rivals both in eloquence and fame!"), to show a picture of a Roman boy going to school.

Physical education: taught to ride, run, leap, box, and swim, also military drill. Mental: reading, writing, arithmetic, oratory; poets, and the speeches of the senators. Manual: industrial trades of the parents. Civic learning: the laws of the Twelve Tables.

2. COMPARISON.

The education of the Romans is compared with that of the past periods studied, and with that of our own times, both as to the ideals and the actual practice of each. The relation of Roman to Greek education is particularly emphasized.

3. MEASURE.

Problems are made from facts regarding the school-room and school building. Have the children make measurements of dimensions as far as possible. Draw plan of schoolroom to scale. Locate objects in the room. Give semi-cardinal points for description of a room in the building, of the school building and surroundings. Roman notation; let the children calculate by tens and twelves and find which is easier. Use of two kinds of money based upon the decimal and duo-decimal system. Work with factors and multiples of ten and twelve. Let them compare the school year of Horatius with their own. Compare his holidays with our New Year's and February 22d. Find the value of a denarius if fifty equalled one dollar (amount of a Roman teacher's monthly fee). Find as many things as possible to which the Romans applied the number twelve. Compare with things to which we apply that number, and see if any relationship exists. Facts about book making and binding; paper and pencil making.

4. EXPRESSION.

Make tablet and stylus; draw articles used then and now in school. Describe or show by pictures the processes of pencil and book making.

READ: F. D. Sherman, Vacation Song.

V. Social Life.

1. THE STORY.

The ideal on the negative side may be presented through the statue of the Dying Gaul, The Gladiators by Gérôme, Nydia by Rogers, and descriptions from Bulwer Lytton's *Last Days of Pompeii*.

On the positive side, pictures of social life by Coomans, pictures of the Appian Way, description of Dido's banquet for Æneas in *Æneid*, Bk. I.

The following lines, translated from Horace, express a characteristic Roman attitude toward life, which influenced their social diversions: —

“Lord of himself that man will be
And happy in his life alway,
Who still at eve can say with free
Contented soul, ‘I’ve lived to-day!
Let Jove to-morrow, if he will,
With blackest clouds the welkin fill,
Or flood it all with sunlight pure,
Yet from the past he cannot take
Its influence, for that is sure;
Nor can he mar or bootless make
Whate’er of rapture and delight
The hours have borne us in their flight.”

Games of the children: dolls, hobby horses, toy houses, carts, tops, dice, stilts, marbles, balls, playing

court and senate, and the game of Troy. Feasts, holidays, etc. (Note especially their relation to religion.) Hospitality: guest, friend, client, etc.

2. COMPARISON.

Compare on all these points Roman life with that of all previous periods and with our own.

3. MEASURE.

Various number-facts are secured from the children in regard to their games, entertainments, etc.

Such questions as the following are suggested:—

What is a good number with which to carry on certain games?

What combinations can be made? What do you do when there are too many? Not enough? Number of marbles possessed by different boys? How gotten? (Show wrong of playing "for keeps.")

How much do marbles cost? Tops? Balls?

• How many dolls have the girls? How many dresses for each? How many dishes? For how many dolls could they set a table? How many rooms in their play-houses? Furniture in each?

Did you ever go out of town for a visit? Where? How long did it take? How much did it cost? How many people helped?

How long does it take to go to — and back? Its cost? Cost for different entertainments?

4. EXPRESSION.

Play the games Horatius played, and invent new ones from the life of the present, such as voting, mayor, city council, policeman, etc. Describe and illustrate Roman visits and public entertainments, processions, etc. Show by drawings the differences between a Roman party and a modern one.

• Read selected lines from Ovid's story of Daphne, and the description of the chariot race in *Ben Hur*, by Wallace.

VI. Industrial Life.

1. THE STORY.

Agriculture: raising of horses, sheep, goats, pigs, poultry, birds, bees. Implements used, processes, products, methods (rotation of crops). Commerce and exchange. Spinning, weaving, preparing and making garments. Public bakeries. Industries related to warfare. Explain the relation of the decline of industrial life to the fall of Rome. Building. Commerce.

Read selected stanzas from Whittier's *The Huskers*, and extracts from Virgil's *First Georgic* and Thomson's *Seasons*.

2. COMPARISON.

Note the advance in industrial life from *Hiawatha* to *Horatius*, then from *Horatius* to the present.

3. MEASURE.

Make problems from facts brought in by the children as to the industrial life with which they come in contact. Explanation of origin of Roman measures of length, surface, weight, liquid and dry measure. Comparisons with our measures; teach such of ours as are in most common use, which have not been taught before, as the barrel. Building to exact measurements.

4. EXPRESSION.

Describe and illustrate industrial processes of Roman times and of the present. Make some of the implements common to both times. The children should be helped to make gardens of their own and to take part as intelligently as may be in industrial life as they come in contact with it.

The children learn to hum Wagner's *Spinning Song* from *The Flying Dutchman*, and *Prize Song* from *Meistersinger*.

VII. The State.

1. THE STORY.

Show how the state is the focus of Roman life, and the basis of all Roman ideals of character. Most of the material for this topic has been involved in topics previously discussed — The Home (Physical Environment), The School, Social Life, and the Church.

The character stories mentioned at the beginning of the outline show the military ideals and regard for law.

The story of The Bell of Atri may be told and parts read by the children. The children learn of the armor and implements of war, the use of public buildings. They should be told of the Roman law regarding libel.

Pictures that may be used are the Death of Cæsar by Gérôme, and the same subject by Piloty.

VIII. The Church.

1. THE STORY.

The ideal may be shown in the stories connected with religious life in the story of Horatius in the *Ten Boys*, particularly the story of Horatia. Temples, especially the Temple of Jupiter and the Temple of Vesta. Religious holidays. The sacred hearth; Lares and Penates, sacrifices.

2. COMPARISON.

The children compare the pictures of the temples with the churches they see. Compare the religious holidays, the religious spirit then and now. Is religion as much a part of all living now as it was then?

3. EXPRESSION.

The children build temples and churches with blocks.

Picture processions to temples and churches. Draw the story of Horatia.

The children read and learn Psalm XV. .

SING : Night and Day, in the *St. Nicholas Song Book*.

BOOKS OF REFERENCE:—

Andrews, Ten Boys.

Preston and Dodge, Private Life of the Romans.

Smith, Dictionary of Greek and Roman Antiquities.

Gilman, Story of Rome.

Butterworth, Little Arthur's Story of Rome.

Von Falke, Greece and Rome.

Becker, Gallus.

Parker, Archæology of Rome.

Middleton, The Remains of Ancient Rome.

Burn, Ancient Rome and its Neighborhood.

Dennie, Rome of To-day and Yesterday.

Church, Stories from Virgil.

Church, Stories from Livy.

Church, Rome in the Days of Cicero.

Anthon, Dictionary of Roman Antiquities.

Hale, Boy Heroes.

Rawlinson, Ancient Religions.

Rydberg, The Emperors in Marble.

Hope, Thomas, Costumes of the Ancients.

Sherman, F. D., Poems.

Field, Eugene, Poems.

Pliny, Letters.

Lanciani, Ancient Rome in the Light of Recent Discoveries.

Morgan, Thomas, Romano-British Mosaic Pavements.

Guerber, Myths of Greece and Rome.

Clarke, Education of Children in Rome.

Meneffe, Stories from the Masters.

Guerber, Story of the Romans.

Bulwer Lytton, Last Days of Pompeii.

Shumway, A Day in Ancient Rome.

Mommsen, History of Rome.

Myers, History of Rome.

Duruy, History of the Romans.
 Gell, Books on Pompeii.
 Boissier, The Country of Horace and Virgil.
 Boissier, Pompeii and Rome.
 Beesly, Stories of Rome.
 Horne, The Buried Cities of Vesuvius.
 Stories of Ancient History, by a Mother.
 Poulsson, In the Child's World.
 Abbott, Story of Romulus.
 Mariott, Facts about Pompeii.
 Gell, Topography of Rome.
 Taylor and Cresy, Architectural Antiquities of Rome.
 Forbes, Rambles in Rome.
 Church, Colour.

PICTURES AND STATUARY:—

- Head of Young Augustus. Capitoline Museum, Rome.
- Antinous. Capitoline Museum, Rome.
- Raphael, Hours.
- Raphael, Days of the Week.
- Augustus. Vatican.
- Apollo in Chariot. From Guido Reni's Aurora.
- Le Roux, Vestal Virgins.
- Le Roux, The Vestal Tuccia.
- Dying Gaul.
- Gérôme, The Gladiators.
- Rogers, Nydia. University of Michigan Art Gallery
- Gérôme, Death of Cæsar.
- Piloty, Death of Cæsar.
- Coomans, A Plot.
- Coomans, A Perilous Passage.
- * Coomans, Education of a Young Patrician.
- Alma Tadema, A Vintage Festival.
- Burne-Jones, The Vestal.
- Gérôme, Circus Maximus.
- Guerin, Æneas at the Court of Dido.
- Herring, Pharaoh's Horses.
- Schopin, Cornelia and her Jewels.

Daubigny, Landscapes.
 Rousseau, Landscapes.
 Raphael, Æneas leaving Troy.
 Knille, Antinous and Hadrian.
 Head of Mars. Munich.
 Bodenhausen, Nydia.
 Sichel, Vestal Virgin.
 Murillo, St. John and the Lamb.
 Murillo, Jacob's Dream.
 Pliny's Doves.
 Rubens, Romulus and Remus found by the Shepherd.
 Millais, Poinona.
 Checa, Race of Roman Chariots.

WULF, THE SAXON BOY

Grade B 3.

Ages of children, eight to nine.

A. ANALYSIS OF CHARACTER.

Wulf is typical of the radical iconoclastic element in character, which seems to be uppermost with the majority of children at this age. It is an era in which the laws imposed by others seem to have served their purpose. They are no longer followed blindly, but scrutinized, questioned, and rejected or confirmed according to the judgment of the individual. He has previously allied himself with the laws which have become apparent to him, and the alliance has been to his profit. But the very gaining of this profit has brought to consciousness the fact that this is not all he needs. He is not yet satisfied. He wants a deeper, a more fundamental law, a law which shall answer the demands of his own nature. It is not that the child

of this period is lawless. He is only following a law deeper than any he has yet known — the law of his own individual nature. This is preëminently the period of individualism. Coöperation on the same terms as before does not seem to appeal to him, but it still exerts an unconscious influence upon action. This strength of individuality leads to a bold, fearless spirit, a vigorous manifestation of likes and dislikes, a hatred of insincerity, and a contempt for weakness of any sort.

B. ETHICAL AIMS.

This is the “storm and stress” period of childhood, and one of the most difficult to deal with. Here, if anywhere, the teacher must be strong, sincere, and large-minded. Much patience is needed, for the child himself has none. No force of authority alone will carry any precept or rule. The appeal must be always to the individual judgment and sense of fairness, for nothing but surface obedience can be secured in any other way. The aim should be to direct and render intelligent this high sense of individualism, to develop right ideas of freedom and of personal responsibility consequent upon it. Independence of thought and action, a brave belief in oneself, and aspiration toward all nobility in character and life, are features of this period that should be fostered by every means possible. The right because it is right, not because it is compulsory, is the thought to hold before the children of this grade.

C. IDEAL EMBODIED IN LITERATURE.

Siegfried is the ideal character for this grade. His adventurous, fearless spirit is shown in his killing of

the dragon, and in the rescue of Brunhild; his belief in himself, by his making of the sword Balmung; his desire for freedom in his going out into the world, leaving his trade; his desire for what is noble, as shown by the story of the "curse of gold," by his purpose to right the wrong, to help the weak, and to punish the evil.

I. Appearance.

1. THE STORY.

(a) *Ideal.*

The German ideal of physical beauty is expressed in the description of Siegfried and of Balder as found in the general references.

(b) *Facts.*

Blue eyes; long, golden hair; ruddy complexion; strong, powerful body.

(c) *Nature-Study.*

Physiology. The value of a strong and healthy body. How to make and keep the body strong. Study of lungs, tissues; stimulants and narcotics; cleanliness.

REFERENCE: Allen, *The Man Wonderful*.

2. COMPARISON.

Races of the past are compared with those of the present as to strength. Adaptation to life of the time and environment.

The following questions are suggested:—

Are people as strong in body now as they were then?

What causes the difference?

What can you do to become strong?

Trace the appearance of Wulf in the children present?

3. MEASURE.

Such questions as the following may be asked:—

• Are you stronger than you were?

Are you large?

How large are you?

Keep a record of your growth.

Keep a record of your strength by what you can do: lifting, rowing, running, throwing, etc.

Who is the strongest person you know?

What can he or she do?

How do these people use their strength for themselves and others?

How should they?

Age, measure of time, names of days of the week.

4. EXPRESSION.

• Show the appearance of Siegfried by drawing and painting. Play games and use exercises of the Viking age. Draw pictures of some child in the room who resembles Wulf.

II. Clothing.

1. THE STORY.

(a) *Facts.*

Clothing of graceful pattern woven with great skill. Wool, linen, silk, threads of gold and silver, possibly velvet, leather, furs, embroidery. Garments similar to the present (see *Viking Age* by Du Chaillu). Beads of gold, silver, glass, bronze, amber, mosaic; buckles, buttons, pins, bracelets, rings, hairpins, and ornaments. Sandals of leather and wood; lace. Cloaks, fastened with fibula; cap or hat; shoes of leather or skins, fastened with woollen strings. Silk string wrapped around

leg to knees. Gloves of skin, sometimes stitched with gold, sometimes lined with down. Needles of bronze, iron, bone, silver; shears of iron. Colors: blue, red, green, scarlet, purple, gray (for every day), white (for slaves). Change of fashions.

(b) *Nature-Study.*

Study of silkworm, amber, tin (bronze). Continue study of color. The children should get some ideas of the scientific basis of color, and should experiment under the teacher's direction and by themselves. They should begin the study of color harmonies. The use of gold and silver threads in the decoration of clothing should bring out the idea of the ductility of silver and gold. As compared with this may be brought out the malleability of gold.

2. COMPARISON.

The clothing of Wulf is compared with the clothing of Horatius and the others, and with the children in school as to material, sources of material, style of garments, adaptation to needs, difficulty in making, implements used, advantages of present methods; number of garments possible, stores, machinery, division of labor, decoration, coloring, comfort (relation to climate), æsthetic quality, cleanliness. Compare weaving and embroidery then and now. Compare standards of measuring.

3. MEASURE.

The children learn our standards as compared with those of Wulf for measuring distance, money, weight of gold and silver, number of garments. The children work with the standards themselves until they are per-

fectly familiar with them. Make problems from facts brought in by the children as to the amount of material needed for clothing (essential and ornamental, its cost), time for making (necessary, decorative, ornamental), cost of machinery, implements, cost of making, cleaning, ornamental accessories (belts, bracelets, rings, buckles, collars, etc.). They should learn the metric system.

4. EXPRESSION.

Cut patterns, make clothing for dolls of Wulf's time and the present (both boy and girl). Reproduce designs used by Wulf, for fibulae and other ornaments, and design new ones. (See *Viking Age*.) Draw, paint, carve, hammer (repoussé work), make, describe, sew. Correct use of terms required by this topic. Words and expressions in German corresponding to articles of dress, materials, occupation, processes, implements, people engaged in different kinds of work.

READ: Robert of Lincoln, Bryant.

SONG: Spin, Lassie, Spin. Music by Reinecke.

III. Home.

1. THE STORY.

(1) ENVIRONMENT.

(a) *Physical*.

Ideal — Description in Siegfried's Journey to Burgundy.

Facts — Brook-basins, water-partings, pastures, forests, meadows, marshes, mountains, rivers, sea, cold winters; moist climate; fish; iron, gold and silver, clay. Domestic animals: horse, cow, sheep, dog.

Read in the story of Siegfried, The Story of Bragi, Balder, The Waking of Brunhild, and How the Springtime Came; also Long-

fellow's Tegner's *Drapa* (Death of Balder), and Matthew Arnold's *Balder Dead* (selections). Selections from Tennyson's *Brook* may be read, Longfellow's *The Brook and Wave*, Tennyson's *The Oak*, Bryant's *March and The Cloud*, Wordsworth's *I wandered lonely as a Cloud*.

SING: There was a Pretty Dandelion, *St. Nicholas Song Book*.

(b) *Nature-Study.*

Study the general structural features of the country about the children's homes, the kinds of slopes, water-parting, brook or river (study river) basin, direction of slope, velocity of water, banks and mouth, soil carried by the water, rise of stream. Study one of the kinds of trees mentioned in Wulf's environment. Select one near school building for all to observe, though children may observe others in different places. Have children learn the names and distinguish the aspect and leaves of trees they see. Show them some mistletoe and tell them how it grows. Lead them to observe any animal life they can find related to the tree, as squirrels, birds, caterpillars, etc. Of what use were these trees and animals to Wulf? To us? Teach evaporation and production of moisture, from the experience of the children. Have the children observe daily temperature and position of the sun. In connection with the city water-supply, study the pump. With physical environment study capillarity.

The children should begin to make classifications of industries as productive, transforming, exchanging; and of products as to their uses.

(c) *Artificial.*

The village. Explain its plan fully, including its government, as a basis for the work of the children.

upon their own city. The study of their own city should be made here as fully as the comprehension of the children will permit.

- The ideal here is Asgard, the dwelling of the gods.

(2) THE HOUSE, ETC.

Naming. Arrangement, quadrangle, with the front facing an open space or grass-plot, the whole surrounded by a fence, entered by a gate. Shingle covered and tarred; iron work; carved doorways. Hall or sitting room: walls hung with tapestry, carvings on walls, hung with shields and weapons, some of them inlaid with gold and silver; used for feasts. Dining room: built east and west; two doors, one for men, the other for women; benches and high seats of honor for the table, which were carved and cushioned, and some parts painted; the master sat at the head of the table with his wife at his left; furniture. Sleeping rooms: windows open or covered with membrane; for upper rooms a balcony and an outside stairway; no chimneys, an open hearth on the floor, with turf (sometimes) used as fuel. Pantry used to prepare food. Straw on the floors. Keys.

Food: bread, butter, curds, ale, mead, buttermilk, fish, meat, wild fruits (raspberry, blackberry). Drinking-horn, spoons of horn. Vessels of silver, bronze, clay, glass. Feasts, women sometimes served. Candles. Study the essential elements in food.

(3) FAMILY LIFE.

The ideal of the time as embodied in literature is shown in the story of Siegfried.

The father's influence is paramount. The mother

is loved and honored. Children are held in high regard. Position of servants.

2. COMPARISON.

Compare (not with too much detail) the structure, soil, and climate of Germany with that of our own section of America, the plants and animals of the two regions, noticing their adaptation to environment. Compare Wulf's village with Rome and with our own city. Compare a home of Wulf's time with one of the present as to family ties, servants, structure, material, plan, number and use of rooms, provision for heat and light, protection, beauty; adaptation to the climate, environment, habits of life, etc.

3. MEASURE.

Learn the origin of the names for the days of the week. Measure the growth of plants, the length of shadows, the amount of evaporation, changes in temperature. Find the time it will take a piece of wood or a boat to float on the river a certain distance. Measure streets and blocks, lots and houses. Have the children find the size of the house and lot where they live, area, perimeter. Teach the rod, square rod, mile, and square mile, and connect with farming as to origin; the measuring of land, by lots, blocks, width of street, size of small parks. Measures and standard used in their own houses as to lumber, bricks, glass, shingles, paper, plastering, papering; for lighting of different kinds, for heating; food. Cost of furniture by sets and pieces, tableware, linen, kitchen utensils. Estimate the cost of the cheapest meal containing essential elements. Estimate the number of dishes and

the cost of food for a children's party. Have the children tell the inventions in their own homes that have been made since Wulf's time.

4. EXPRESSION.

Draw a map of the country about to show slope; draw map of schoolroom and school yard to scale. Draw, mould, paint, describe things seen in the parks, and in the country round about. Draw trees, flowers, and animals studied. Draw and paint leaves and flowers, mould nuts. Make an island in sand, show its relation to the river. Show brook-basin with the water-parting, in the sand. Draw forest, meadow, marsh, mountain. Mould mountain. Draw plan of Wulf's town, and show its general features, and a map of our own city. Have the children make a play-house to resemble a house of Wulf's time, and one like their own, furnish them with appropriate furniture, and make dishes and wagons, by drawing, coloring, making, moulding, carving, whittling. Invent new designs. Describe and play scenes to illustrate the home life of each period.

READ: Whittier, Barefoot Boy.

Celia Thaxter, The Robin.

Schiller, The Rainbow, Moon and Stars.

SING: The Sing-away Bird, in *St. Nicholas Song Book*.

The Song of the Robin.

PICTURES: Rusdal, Landscapes.

IV. School.

1. THE STORY.

(a) *Ideal*.

The ideal as embodied in literature may be shown

in the story of Siegfried's apprenticeship to Mimer. Picture, The Forging of Balmung, Howard Pyle.

(b) *Facts.*

Warlike exercises. Athletic games. Learning poetry, saga-telling, riddles, chess, harp-playing, runes. Moral code. Purpose, to preserve a strong people ready for war, and for social life. Custom of sending children to the home of some prominent man to have the benefit of the education of his sons.

(c) *Nature-Study.*

Study chalk, and graphite (in pencils), where found in our own state, and how obtained. Processes of manufacture. Study iron from ore to making of steel. Iron in the soil as source of plant food and material for paints. Iron in the human body.

2. COMPARISON.

Have the children tell the differences between education then and now. Try to have them understand what school is for, that it is for them, that what they are to become depends largely upon what use they make of it, that school should help them every day.

3. MEASURE.

Any measurement growing out of games, feats of strength, skill, time occupied in different kinds of school exercises, time out of school spent in games. Teach 60 minutes = 1 hour, 24 hours = 1 day, 30 days = 1 month, number of days in the different months, 365 days = 1 year. Measurement of room, of pupils, of points in the weather report.

4. EXPRESSION.

Have the children tell the story of the German boy's school, illustrating by drawings. Let them tell riddles, and devise a moral code. Have them make up sagas, telling of the noble deeds they have seen, or of which they have heard, and sing songs of noble deeds. Have the children find out the German equivalents for some of our most common and necessary words; let them determine some of the differences in idioms.

READ: Longfellow, *The Village Blacksmith*.

Story of Sigmund, from Morris's *Sigurd the Volsung*.

SING: Mozart, *The Blacksmith*.

V. Social Life.

1. THE STORY.

(a) *Ideal*.

As representing ideals of the time in social life, read accounts of Siegfried's visit to Regin, and Regin's playing, of Bragi the harper, of the Feast in Aegir's Hall, how Brunhild was welcomed home, etc.

(b) *Facts*.

Great hospitality. Feasts. Preparation of halls. Entertainment: poems, sagas, music (harp and form of violin), toasts, skalds. Seating of guests. Presents to guests. Servants, service of women. Festal dress of men and women. Dishes of gold, silver, bronze, glass, etc. Chariots, carriages, horses, candle-bearers furnished by host to take the guests home.

Games: checkers, riddles. Falconry and hunting.

2. COMPARISON.

Have the children tell of their own social pleasures.

plays, games, entertainments. Let them say which they like best, and why; what preparations they make; how they behave. Do they try to make others enjoy themselves? Have we any customs similar to those of Wulf's time? Compare with the pleasures of Horatius and of others before him.

3. MEASURE.

Materials, amount, and cost of cake for a children's party. Of lemonade. Of other kinds of food used. Cost of tickets for entertainments for the children of one family. Cost for a family to go to a picnic.

4. EXPRESSION.

Copy beautiful designs of articles used by people of Wulf's time; vessels, chairs, embroideries, fibulæ, musical instruments, costume, chariots. Dress dolls for a party, arrange play-house, set table, make and carve furniture. Describe and picture a social scene of Wulf's time. Tell the stories they told. Sing appropriate songs.

VI. Industrial Life.

1. THE STORY.

The ideals of industrial life at this period are embodied in the stories of the dwarfs, who are the great workmen. Alberich's Story (in Adventure XV., *Story of Siegfried*), and Siegfried's forging of the sword *Balmung*, and the Story of Riger, should be read in this connection. The chiefs of this mythical age did not disdain work, but they never wrought from the desire for gold, but rather to gain power and the means to do some friendly or generous act. The story of the

Curse of Gold is especially significant in this connection.

Making of armor and weapons. Agriculture (rotation of crops). Goldsmith's art — smith held in great honor. Glass-making. Enamelling. Weaving — great skill, threads of gold and silver interwoven. Embroidery, beautiful designs, tapestry (historical subjects). Ship-building (beautiful sails). Boats for war, fishing, and trade. Salt and tar making. Bronze, gold, and silver ring money. Insurance companies (show principle).

Nature-Study.

Study the elements of glass and sequence of manufacture of glass making. Study woods of different kinds. Why did the Germans and why do people of the present time choose certain kinds of wood for certain purposes?

2. COMPARISON.

Compare the primitive method of making steel with that of the present (in essential points only).

Why not wear armor now?

Why didn't they use guns then?

Why did they have and care so much about such beauty and variety in armor and weapons?

How could they wear such heavy armor?

Compare weaving then and now, boats, number of occupations at that time and in ours. Why the difference? Take the occupations represented in one block in your city, and see if the children can trace any of them back to Wulf's time. Do we ever have such beautiful harness and decorations for our horses?

When? Would you rather use such money as theirs or ours? Why? Compare German with Roman industries.

3. MEASURE.

Proportion of parts in making steel (teach percentage). Measure used in weighing gold. Cost of ornaments in gold; cost of common glassware and of beautiful kinds (such as Bohemian). Why the difference? Difference in size, capacity, and rate of speed between boats then and now. Length of fishing voyages. Time required for voyages of a certain length. Difference in time required for weaving then and now. Exact measurements used for all articles made in the expression work.

4. EXPRESSION.

Tell, or write, and illustrate by drawings the processes of sword-making and of boat-building. Draw beautiful vessels, ornaments, designs for swords, embroidery, boats. Whittle, carve, or paint swords, shields, and boats. Mould and decorate vessels of beautiful form. Make a loom. Embroider. Make wagons, chariots, and a "dragon" boat. Learn words from the German language for most important objects and industries.

READ: Longfellow, *King Olaf's Return* (tenth and eleventh stanzas).

SING: *There's a Ship on the Sea*, *St. Nicholas Song Book*.

VII. The State.

1. THE STORY.

The basis of government at this period was the idea of individuality. Every free man was entitled to follow the leader whom he chose as most worthy. Nothing but nobility could gain a following. Property was

earned rather than inherited. The spoils of battle were divided according to the part each had borne in the fight. Every free man had his share in the government. (Note moot-courts, landmarks, etc.)

2. COMPARISON.

The freedom of Wulf is compared with that of Horatius and those before him.

Such questions as the following are suggested:—

Could Horatius choose his leader? Do we?

Who else had this privilege among the boys about whom we have studied?

Did all the people in Rome take part in the government?

Were there serfs and slaves in Rome?

Where did the Romans meet to decide what should be done for the people? The Greeks?

Compare the German moot-court with our city government in essential points.

- Do we divide the land as the Germans did?

How does any one procure land now?

Is there any land used in common now?

To whom does this belong? What is the city treasurer for?

Were punishments the same now as then?

What is a jail for? A police court?

Have the people as much to say about what shall be done for all now as then?

Are the people as well taken care of?

What things are owned by the city you live in?

Why do we have firemen, postmen, etc.?

Why not take care of ourselves?

3. MEASURE.

The city government is studied with especial reference to the number of people required to transact its business—councilmen, policemen, board of education, fire department, etc. Time of holding office.

4. EXPRESSION.

The children show by telling, drawing, and playing, the ideas they have gained of the state in Wulf's time and the present.

VIII. Religion.

1. THE STORY.

Stories of Odin and the Creation. The tree Ygdrasil. Asgard. Valhalla. Code of morality.

The teacher should read for herself *The Hero as Divinity* in Carlyle's *Heroes and Hero Worship*.

2. COMPARISON.

Compare with previous religions and with the children's conceptions.

3. EXPRESSION.

The expression will be shown in moral character.

READ: Longfellow, Tegner's *Drapa*, and parts of the *Saga of King Olaf*.

REFERENCE BOOKS:—

Du Chaillu, *Viking Age*.

Morris, *Sigurd the Volsung*.

Anderson, *Norse Mythology*.

Green, *History of England* (Chap. 1.).

Tacitus, *Germania*.

Gummere, *Germanic Origins*.

Gibbon, *Decline and Fall of the Roman Empire*.

Kingsley, *Roman and Teuton*.

Kemble, *Saxons*.

Guizot, *History of Civilization*.

Stubbs, *Constitutional History of England*.

Baring-Gould, *Story of Germany*.

Adams, *Civilization during the Middle Ages*.

Beowulf.

Freeman, Norman Conquest.
Lord, Beacon Lights of History.
Baldwin, Story of Siegfried.
• Andrews, Ten Boys.

The pictures by Howard Pyle in Baldwin's Siegfried should be shown, those in Dippold's The Ring of the Nibelung, photographs from Wagner's Siegfried, Hoffman's and Pixis' pictures of Wagner's operas, Schnorr Von Carolsfeld's wall pictures.

Stöbe, Head of Valkyrie.
The Sleeping Beauty's Palace.
Siegfried awakens Brunhild.
Dielitz, Woton's farewell to Brunhild.
Dielitz, To Walhalla.
Howard Pyle, Siegfried forging the Sword.
Howard Pyle, Siegfried and the Dragon.
Dielitz, Siegfried and the Dragon.
Constable, The Cornfield.
Millet, The Rainbow, Angelus.
Landseer, The Monarch of the Glen. .
Rosa Bonheur, On the Alert, The Norman Sire, Ploughing.
Herring, Village Blacksmith.
Velasquez, Tapestry Weavers.

GILBERT, THE FRENCH BOY.

Grade B 3.

Ages of children, eight to nine years.

A. ANALYSIS OF CHARACTER.

In the child of this period altruistic tendencies, his desire to serve, are closely intertwined with the spirit of adventure. His is the high tide of life that inevitably makes the expression of noble conceptions aggressive. He is impatient to right wrongs at once. He is not willing to wait for growth and development.

He likes to pose as a protector, and is usually not reluctant to accept the glory due his exploits. He has greater patience and endurance than Wulf. He comprehends to some extent the conditions of life about him, and begins to recognize more clearly the inequalities of society. The contrast between his strength and the weakness of others arouses sympathetic feelings and impulses of helpfulness. His altruistic ideal manifests itself in greater thoughtfulness for others (politeness). The beauty of goodness, of conduct, of appearances appeals to him. The impetuosity which often led to the rudeness of Wulf has been tempered into self-control and deference. High ideals of conduct characterize him in all relationships and especially in friendship.

Read selections from Tennyson's *Idylls of the King*, *Holy Grail*, etc., to show the characteristics of a true knight, Lowell's *Vision of Sir Launfal*, and other references given.

B. ETHICAL AIMS.

Because of the desire of children of this age to pose as protectors for those weaker than themselves, the chivalrous impulses, the love of adventure, the susceptibility to high ideals and the tendency to superstition, the ideals of mediæval chivalry, are the rallying points for all the work of the grade. Of these, service stands first, and, in order to service, worthiness, which means, specifically, courage, loyalty, and purity in heart and life.

C. MATERIAL.

The "storm and stress" of Wulf's period has now become somewhat centralized about the ideals of Chris-

tianity. The Christian conception of service has come in to furnish an outlet for the superabundant energies of the age, and to satisfy at the same time its genuine aspirations toward nobility. Gilbert is not the negation, but the further development of Wulf, a development focussed upon the Christian standard of life as then conceived.

The ideal characters for this period are Roland and King Arthur's knights, especially Sir Galahad, who is characterized in the minds of the children by the couplet:

"My strength is as the strength of ten,
Because my heart is pure."

King Arthur is known by the description:—

"Who revered his conscience as his king;
Whose glory was, redressing human wrong;
Who spake no slander, no, nor listened to it;"

and the Arthurian ideal of knighthood by the phrase:—

"Wearing the white flower of a blameless life."

I. Appearance.

1. THE STORY.

Ideals of personal appearance are embodied in descriptions of Roland and Charlemagne in Baldwin's *Story of Roland*, and in the pictures of Fra Angelico. Description of Galahad and Siege Perilous in Tennyson's *Holy Grail*.

READ: The Poet's Tale (Charlemagne), Longfellow.

Strong bodies. Manly bearing in men, graceful bearing in women. Training of body for strength, skill, grace.

2. COMPARISON.

The ideals for personal appearance in chivalric days are compared with those of previous periods studied, and with those of the present; the appearance of Gilbert with that of the type-characters of earlier epochs, and with that of the children in the room, as to strength and grace, fearless but kindly expression, military bearing, and courteous conduct.

3. NATURE-STUDY.

Physiology.

Value of physical exercise; habitual positions. Breathing (lungs), eating (teeth).

4. EXPRESSION.

The children strive for grace of bearing, for fearless, kindly facial expression, for control of the countenance, whatever may be the feeling, for beautiful behavior, politeness, thoughtfulness, and adaptability.

II. Clothing.

1. THE STORY.

A armor, tunic, cloak, shoes, purse, hat or cap. Silk, fur.

READ: Description of Arthur at Camelot, in Elaine.
Charlemagne, in the Story of Roland.

Pictures illustrating the dress of the period are found in—
Kretschmer and Rohrbach, Costumes of all Nations.
Le Costume Historique, Vol. III.
Lacroix, Manners, Customs, and Dress of the Middle Ages.

2. COMPARISON.

Compare with dress of former periods. Show influences of both Roman and German. Compare with

the present. Which shows more grace in design, more pleasing combinations of color? Same points as under study of Wulf.

3. MEASURE.

Same points as under Wulf.

4. EXPRESSION.

The children dress dolls to show the dress of a boy and a girl of Gilbert's time and of our own. They copy pictures showing different costumes.

III. Home.

1. THE STORY.

(1) ENVIRONMENT.

(a) *Physical.*

• Temperate, sunny climate. Mountains, streams, forests, vineyards. Deer, hawk, eagle, peacock, heron. Rose, fleur-de-lis. Building stone.

READ: Tennyson, The Splendor falls on Castle Walls.

Lowell, The Oak.

Longfellow, Flower-de-luce.

SING: Schubert's The Wanderer, and Winds are Breathing.

(b) *Artificial (with Industrial Life).*

The community within the walls of the castle, possibly a village and a monastery near the castle. Different occupations carried on inside and without the walls. Coöperation and division of labor, how related to each other. Hospital, school, chapel, fairs; peddlers; roads; bridges.

READ: Longfellow's The Builders and The Castle-builder.

(2) HOUSE.

(a) *Structure.*

Ideal castles on the Rhine. Discuss the plan of the feudal castle, in general and in detail, showing its relation to its environment and to the needs of the times. Windows, moat, drawbridge, and wall (purpose). Heating, lighting. Bring out the children's ideas as to the beauty of the castle architecture. Show pictures of famous castles. Show Warwick Castle and one of the ducal palaces of Venice, studying for likenesses and contrasts. Read the description of Arthur's Hall from Tennyson's *Holy Grail*.

READ: Scott, *Marmion*, from the line,

"My castles are my king's alone," to

"Let the portcullis fall!"

(A plan of a feudal castle is to be found in Sheldon's *General History*.)

(b) *Furniture.*

Beautiful carved furniture, tapestry, etc.

Pictures of the interior of a mediæval castle and its furniture are shown in *Le Costume Historique*, Vol. III.

(c) *Food.*

The description of the feast given in Chapter II. of the *Story of Roland* shows the ideals of the time. The following points should be covered: Kinds of food, how served. Duties of pages at meals. Fine pottery and vessels of various kinds. Courses. Table accessories, customs, etc.

(3) FAMILY LIFE.

Beautiful family relationships; politeness, service. Position of women. Boys proud to serve their parents,

especially the mother. Hospitality. Duties of different members of the household community. Servants. Pets: horses, dogs, hawks.

• The ideal relationship between mother and son is that between Roland and his mother, the Lady Bertha.

Read to the children selections from —

Dove in the Eagle's Nest, Yonge.

Tennyson, Story of Gareth (for obedience).

SING: Lullaby, J. G. Holland, in *St. Nicholas Song Book*.

Mendelssohn, Home-Sigh.

2. COMPARISON.

Compare Gilbert's home with the homes of all previous persons studied. Contrast the city life of Darius, Cleon, and Horatius with this. Compare with German village. Difference in kind of leadership. Carry on work begun under Wulf on our own city, using the simplicity of the historic period to explain the complexity of this. Compare the work of monks in farming, building, draining swamps, making roads and bridges, with such work now. Compare the period of Gilbert with that of other type-characters studied, and with our own as to family ties, relation of children to parents, structure of the house, food, customs at table, etc.

3. MEASURE.

Number of people required to satisfy the ordinary wants of life, number to supply luxuries. Compare the number of people then needed for the raising of grain, its grinding in a simple corn-mill, and its baking in the oven, with the number required to prepare bread for us. Consider the standards growing out of the necessary

exchanges. The cost of measures of each form from grain to bread. Equivalents; as, an acre will produce so much wheat, a bushel of wheat so much flour, a pound of flour so much bread, a loaf of bread costs so much, etc. Take other occupations in the same way, as time permits. Study other occupations belonging to the period: illumination of manuscripts, mosaic work, staining glass, painting, frescoing, carving, enamelling, metal work, clock making. In the study of the last named, get the dimensions of the wheels, length of pendulum, measures of time. Dimensions of river bridge. Compare with those of the bridges on the local river. Study the lever, principle of a fountain.

4. EXPRESSION.

The children construct the environment of the castle, physical and artificial, by means of sand, blocks, or any appropriate materials. They reproduce the life of the time in their games. Different occupations are chosen by different children and each acted out. They build a castle of blocks, or mould it in clay, draw plan, make play-castle and its furniture. Set table and have a feast with dolls for people. Mould dishes, paint design for tapestry.

Industrial Life is included in the study of the home.

IV. School.

1. THE STORY.

Ideal of Lady and Gentleman.

Training for knighthood: page, squire, knight. Religious training. Training in courtesy. Studies: reading, writing, number, geography, history, literature,

music, alchemy. Sources of learning: manuscripts, travellers, teachers. Education of girls; heroic girls. From the fact that many people of that time could not read books or manuscripts, show how art grew out of the necessity of communication.

READ: Tennyson, Sir Galahad, and Morte d'Arthur.

2. COMPARISON.

Compare the education of Gilbert with that of the type-characters in former periods, emphasizing the purpose of the education in each case. Compare the purpose in former times with that of our own age. Have the children tell what their own education is for.

3. MEASURE.

The children measure their own progress in knightly character from day to day, not comparing themselves with each other, but with some ideal knight, whom they choose to follow, as Sir Galahad, Sir Launfal, or King Arthur.

4. EXPRESSION.

The children tell and write stories of their favorite knights, illuminating their manuscripts and drawing pictures to illustrate them. They act out scenes from the careers of these knights. They make the coat-of-arms for one or more of them. They carry out the idea of knights and ladies in school and earn their own promotions from page to squire. They elect a king and queen chosen for character, and have the ceremony of knighting. They show how polite they can be to each other and to the teachers, the boys to the girls, and the girls to the boys. They bring in reports of polite things

they see, and try to be polite at home, in company, on the streets, in public places. They constitute themselves knight-errants, keeping themselves pure in thought, word, and deed, seek everywhere and always to right wrongs, to defend the helpless and oppressed, yet with courtesy even to foes, to assist those younger and weaker to whom they can give help (particularly brothers and sisters at home), and to master all unworthy feelings.

The teacher should in this grade pay as little attention as possible to the negative side, but lay emphasis upon positive ideals and attainments. She should impress the idea that no task is too small for a true knight if only it be really helpful to other people, and enlist them in crusades against the littering of the streets with papers, the careless throwing of fruit-skins, etc., upon the sidewalks, and similar common abuses.

READ: Longfellow, *The Children's Crusade*. (Part I, stanzas 1-4 and Part II.)

V. Social Life.

The material upon this point, both real and ideal, is gained from the general references already given, especially from the story of Roland and Oliver, as the ideal of friendship, and for ideals of feasting and merriment, the description of English Christmas festivities of this period in *Marmion*, Introduction to Canto VI.

1. THE STORY.

Brothers at arms. Banquets: minstrels, troubadours, games, stories. Tournaments. Hunting parties. Hospitality. Festal dress and customs.

2. COMPARISON.

The past and present ideas of social life are compared in detail with those of chivalric days. Compare the

friendship of Roland and Oliver with that of Damon and Pythias, of David and Jonathan, and Hiawatha and his two friends.

READ: Finding of the golden crown, in Tennyson's *Elaine*.
Description of the tournament at Camelot.

3. EXPRESSION.

The children tell, write, picture, and act out scenes illustrating the social life of the feudal period and of our own. They imitate the stately courtesies and language of Gilbert's time. They learn French words and phrases in common use and words of French origin in our language.

SING: The Minuet, *St. Nicholas Song Book*.
Mendelssohn, Cradle Song.
A Lullaby, *St. Nicholas Song Book*.
Schubert, Serenade.

VI. The State.

1. THE STORY.

The idea of coöperation at the basis of feudalism. Services rendered by each class to each other. The administration of justice, etc.

READ: *Marmion*, Canto V, Section VI.

2. COMPARISON.

Compare the bond of social union in the age of feudalism with that of Wulf's time and of our own. Note differences in the administration of justice from one age to another.

3. EXPRESSION.

The children copy pictures showing the characteristic dress, attitude, and services of the different classes in

the feudal state. They play games based upon their ideas of the state of feudal society.

The teacher should notice whether all the children wish to be either the lord or the lady of the castle. If so, she may conclude that the idea of coöperation has not yet been sufficiently assimilated.

VII. The Church.

1. THE STORY.

The religious ideal of service is embodied not only in the social structure of the period, but in its pictures (as an attempt to serve the ignorant masses who could not read), and in the faithful, sometimes lifelong, work bestowed upon the cathedrals, their carving, painting, frescoing, mosaics, and stained glass. Every small detail was wrought into perfection, as a religious service.

PICTURES: Angels, from Madonna and Saints by Fra Angelico. Uffizi, Florence.

Tell the stories of —

The Legend Beautiful, by Longfellow.

The Legend of St. Christopher.

Stories from the life of Jesus as a historic character. (These stories should be familiar, in order to an understanding of the art of the period.)

Study cathedrals of Amiens and Rheims. (See *Cathedrals of the World*, Allen.) Trace the evolution of the cathedral from the buildings of Greece and Rome. Show the influence of other peoples, as in St. Mark's. In the study of the cathedral notice the beautiful windows, doors, spires, bell-towers, flying buttresses, sculpture, frescoes, mosaics, rounded and pointed arches, gargoyles. Show symbolism in the structure. Organs:

study to get principle of the instrument. Study the lives of Handel and Bach. Monks: their benefit to their own time and in preservation of things of value to the present. Life, dress, home. Crusades.

READ: Bryant, Forest Hymn.

SING: Gounod, Ave Maria. (The words need not be used, unless the teacher wishes. The air alone may be sung by the children.)

2. COMPARISON.

The religious ideal of feudalism may be compared with those of the past and of the present, especially as regards its relations to everyday life. Compare the decoration of Greek and Roman temples with the decoration of cathedrals. Compare cathedrals with modern churches known.

3. MEASURE.

Measures growing out of study of cathedrals in whole and in parts, for definiteness of idea. Time and numbers connected with the crusades. Measurements growing out of the study of the organ.

4. EXPRESSION.

Build cathedrals of blocks, mould them in clay. Draw and describe one in particular, as Amiens cathedral. Copy the designs used in its decorations by means of sticks, tablets, rings, etc., drawing and painting. Invent new designs.

READ: Longfellow, My Cathedral, and The Statue over the Cathedral Door.

PICTURE: Picture of statue of St. Christopher at Cologne.

RELIEFS SUGGESTED :—

* Donatello, Angels with musical instruments, from altar-piece in Church of San Trovasso, Venice.

Donatello, Angels adoring.

Donatello, Christ and St. John.

Della Robbia, Boys and girls singing and playing on musical instruments, in Museum of Santa Maria del Fiore, Florence (seven pieces).

Della Robbia, Madonna from Hospital of Innocents, Florence.

REFERENCE BOOKS :—

Andrews, Ten Boys.

Baldwin, Story of Roland.

Tennyson, Idylls of the King.

Wiethase, Der Dom zu Köln.

Lübke, History of Art.

Allen, Great Cathedrals of the World.

Larned, Churches and Castles.

Lovett and Green, French and German Pictures.

Norton, Church Building in the Middle Ages.

Rosengarten, A B C of Gothic Architecture.

Carroyer, Gothic Architecture.

Turner, History of Architecture.

Lacroix, Manners and Customs of the Middle Ages.

Bulfinch, Age of Chivalry.

Brooks, Chivalric Days.

Scott, Tales of Chivalry.

Malory, Morte d'Arthur.

Farrington, King Arthur.

Hanson, Stories from King Arthur.

Southey, Chronicles of the Cid.

Karpeles, Allgemeine Geschichte der Litteratur.

Harrison, Meaning of History.

Pyle, Men of Iron.

Lanier, The Boy's Percy.

Lanier, The Boy's Froissart.

Lanier, The Boy's King Arthur.

Hallam, Middle Ages.

Adams, Mediæval Civilization.
 Muloch, The Little Lame Prince.
 Pugin, Gothic Ornaments.
 • Statz and Ungewitter, Gothic Model Book.
 Guizot, History of Civilization.
 Hunnewell, Historical Monuments of France.
 Singleton, Towers, Turrets, and Steeples.

PICTURES:—

Watts, Galahad.
 Abbey, Quest of the Holy Grail. Boston Public Library.
 Fra Angelico, Angels. Cloister San Marco, Florence.
 Raphael, St. George. Louvre.
 Guido Reni, St. Michael. Church of the Capuchins, Rome.
 Guido Reni, St. Sebastian.
 Corot, Landscapes.
 Burne Jones, Holy Grail Series.
 Andrea del Sarto, Head of John.
 Leonardo da Vinci, Last Supper.
 Titian, St. Christopher.
 Statue of St. Christopher, Cologne Cathedral.
 Carlo Dolci, St. Cecilia.
 Strudwick, Elaine watching the Shield of Lancelot.
 Velasquez, Prince Charles in Armor.
 Abbey's illustrations of the story of the Holy Grail (in the Boston Public Library).

COLUMBUS.

Grade A 3.

Ages of children, nine to ten years.

A. ANALYSIS OF CHARACTER.

The child of this period craves a broader experience. He loves adventures and experiments. His outgoing vitality demands something beyond the commonplace.

Such a spirit seems to be in general characteristic of a certain period in the history of the child, following the period of chivalric impulses and the first ideals of service. These ideals of service are to some extent realized, and through their realization the child becomes conscious of broader opportunities for more adequate service. His knowledge has increased, so that his outlook is wider, and his courage and determination have grown through his chivalric training, until he can follow a slender possibility with undaunted mind, to the heights of successful realization. He is a practical idealist.

As a parallel study in idealism and courage, the character of Joan of Arc is attractive. Frémiet's statue; Maillart's and Lepage's pictures, Joan of Arc listening to Angel Voices; Joan of Arc before the Shrine, by Mmc. de Chatillon; and the pictures in Personal Recollections of Joan of Arc, by Mark Twain (*Harper's Magazine*), may be used.

The story of Dante's *Divine Comedy* may be used in this grade, as to its main outlines at least. Its symbolism will be found attractive to the children at this period, and may be used, both negatively and positively, to inculcate moral lessons.

This is a period of art renaissance, and the famous pictures should be freely used, particularly those of Leonardo da Vinci, Michael Angelo, and Raphael. In the study of these pictures the supremacy of the spiritual over the physical should be noted.

B. ETHICAL AIMS.

This is, more than any other age in childhood, the age of intelligent speculation leading to experiment. The knowledge of the child gives him the data for comparatively wide excursions of thought, and these should be encouraged rather than repressed. Later the child is

more conscious of his limitations, and will not attempt what is now undertaken with enthusiasm and patience. But he should be led always when possible to subject his speculations to the test of actual experiment, risking something upon the experiment if necessary. He should learn to rely upon himself, to use his own judgment, and to be persevering in following out an idea. The industrial spirit begins to be prominent here, and should be directed into right channels.

C. MATERIAL.

The age of Columbus is a natural outgrowth from the age of feudalism and chivalry. Chivalric enterprises, the crusades, etc., had brought men into closer contact and made the world smaller. The result was a reaching out in all directions for new and larger opportunities for service. Columbus is the best type of this aggressive, out-pushing, courageous, intelligent, and determined spirit that characterized in all lines the fifteenth century.

I. Appearance.

1. THE STORY.

A photograph should be shown of the statue of Columbus in Genoa, of The Boy Columbus in the Boston Art Museum, of Canova's Columbus, of Columbus at the Convent, and of Riffenstein's Columbus and the Egg. Courage, determination, and intelligence are shown in the face and bearing of Columbus. The description of his personal appearance should be read from Irving's Columbus.

2. COMPARISON.

Study of individuals, statues, pictures, etc., to find

those which show the characteristics of Columbus. Have children "read faces." Inculcate idea that the body expresses the character of the individual.

3. MEASURE.

Proportion of parts of the body. Make measurements as a preparation for drawing. Measure of statues, pictures, etc., by the best artists, to find proportions used.

4. EXPRESSION.

Exercises to secure alertness, precision, confident carriage of body. Describe, draw, paint, or model statues, figures from famous paintings, relief-work, and children in the room.

READ: The story of Columbus in Eggleston's *Primary History*.

II. Clothing.

1. THE STORY.

(a) *Ideals and Facts.*

The ideals of the time will be found in the pictures of the great artists of the period.

Pictures and statues of Columbus should be freely used. For details of the dress of the period, *Le Costume Historique*, and Lacroix's *Manners, Customs and Dress of the Middle Ages*, will be found useful. The use of cosmetics, perfumes, wigs, attention to the toilet, cleanliness, individuality of fashions, etc., should be especially noted.

(b) *Nature-Study.*

The duty of attention to dress and toilet may be discussed under this head. To introduce the study of the

skin, the story may be told of the boy who was gilded to take part in a procession, and died as a result of the process. The use of cosmetics may be treated here.

• (c) *Processes and Inventions.*

The processes of perfume, lace, and velvet making are studied.

2. COMPARISON.

The dress of the Columbus period is compared with that of previous times and with the present.

3. MEASURE.

The clothing of this epoch is compared with that of our own by means of number as to the cost of material, cost of transportation, difference through use of machinery, etc.

4. EXPRESSION.

Dress dolls to show dress of Columbus as a boy, and as a man ; a doll to show the dress of his sister ; to show Spanish dress.

READ: From *Stories of Industry* (Educational Publishing Co.)
on clothing.

III. Home.

1. THE STORY.

(a) *Ideals and Facts.*

(1) ENVIRONMENT.

(a) *Physical.*

The love of nature during this period as indicated in the lyric poetry should be emphasized, and characteristic bits of nature description read. The lands that Columbus saw should be noted, and attention called to

the fact that the environment of the individual has now broadened to include a large part of the world. Mountains, plains, hills, seas, gulfs, semi-tropical vegetation, warm climate, belong to the experience of Columbus. Generalizations may now be made on the forms of land and water.

(b) *Artificial.*

Time of great cities — something of Genoa, Venice, Lisbon (compare with our own city). The Moors, Alhambra. Botanical gardens, landscape gardening. Collections of animals. Beautiful buildings: guild-halls, cathedrals, city halls, statues, fountains, palaces, monasteries, pictures, stained glass. Influence of Greek, Roman, and Moorish art. Gothic arch, universities. Wars and leagues between cities. Warehouses in Genoa. Campo Santo, narrow streets, walls, washing-places.

As Columbus extended the boundaries of his knowledge, as he wished to see and know other places and countries, so have the children extend the boundaries of their knowledge. After studying their own city, study the township, county, state. Let each contribute his knowledge of any place or region of which he knows.

(2) HOUSE.

(a) *Structure.*

Supposed home of Columbus in Genoa and in Lisbon (ideal of the time — country villa). Improvements over former period; chimney, use of glass, soft beds, carpets, bedroom furniture, sideboard, clocks; artistic forms in all articles.

(b) *Furniture.* (c) *Food.*

Find materials from references given, and treat as in previous grades.

(3) FAMILY LIFE.

Irving's *Columbus* and Burekhardt's *Civilization of the Renaissance* will furnish the desired material.

Early independence of family protection and care. Domestic economy of home highly developed. Outdoor life.

(b) *Nature-Study.*

Select for study some of the semi-tropical fruits known both to Columbus and to the children, such as oranges, lemons, bananas, etc. The plants may be found at a florist's, where the children may study their life-history. The children should learn some of the best-known constellations (study the life of Copernicus and Kepler). By observation through the term, determine the effect of the sun's position on temperature. The plants, minerals, and animals of the state should be studied.

In connection with the study of plants and animals, the protective and attractive coloring should be noted.

(c) *Processes and Inventions.*

The telescope. Study life of Galileo.

Review study of pendulum, velocity of falling bodies.

2. COMPARISON.

Comparison should be made in detail, wherever it will be of value in bringing out the progress made. The emphasis of the work should be on the study of the children's own city, county, and state, and a thor-

ough study of these made. The children's concepts will be made clearer through the comparisons.

3. MEASURE.

Facts to make clear any points in the physical or artificial environment, to give ideas of size, capacity, velocity, value, temperature, distance, time, productiveness.

4. EXPRESSION.

The children's ideas about the home and environment of Columbus and of their own are expressed by means of maps, diagrams, pictures, description, moulding, making, painting.

Read about Kepler, Galileo, and Copernicus, in *The Storyland of Stars*, by Mara L. Pratt.

Read also Marco Polo's Travels, Shelley's *The Cloud*, Tennyson's *The Throstle*.

SING: *Italy, and On Wings of Song I'll Take Thee*, by Mendelssohn.

IV. School.

1. THE STORY.

The broadening of education from the revival of learning and from the recent discoveries of Marco Polo and others. Geography, geometry, and astronomy were the favorite studies, because of their bearings upon nautical affairs. The invention of printing and of paper had now begun to increase the number of books. The art of the time had its effect upon education.

The children should become thoroughly familiar with the art of the period, and with the main outlines of the lives of its chief artists.

The stories of Gutenberg and of Bacon should be used.

2. COMPARISON.

A comparison may be drawn in detail between the schools of Columbus's time and those of the present.

- Some such questions as the following are suggested : —

Of what advantage will what you are learning be to you?

You are learning some of the many things Columbus did, but many more. Are you going to use your knowledge to help others?

It is possible there are other continents to discover, but there are things that will help the world even more than new continents. The more you help the world, the more you help yourself.

Of what improvements do you know since the time of Columbus?

How can one part of the world help another as it could not then?

Have you as much courage as Columbus had?

What gave him so much courage?

3. EXPRESSION.

Making of maps and charts of the home environment, county and state. Some Italian and Spanish words may be taught, especially such as furnish us with derived or adopted expressions.

V. Industrial Life.

1. THE STORY.

Effect of recent application of compass to sailing. Commerce. Rivalry of cities. Fairs. Guilds, as an expression of idea of coöperation. Invention of printing and of process of paper making from linen. Process of engraving, of oil painting, of decorating pottery. Musical instruments. Study the magnet and the compass.

2. COMPARISON.

Show advancement made along the lines of the dif-

ferent inventions mentioned. The children should see the working of a modern printing-press, the process of paper making, of engraving, and any other processes mentioned that are carried on in the community. The children should be led to see the advantages they enjoy through these inventions. They should compare the coöperation of the guilds with the competition of to-day, to the end that they may care more for coöperation than competition. Compare the fairs with the stores of the present.

3. MEASURE.

Use of facts reduced to the exactness of number (some of which may be expressed in the form of percentage) to show the progress made, and to show their value in our present civilization in printing, paper making, engraving, pottery, travel by water, and means of communication of different kinds. Number of persons who are engaged in these occupations (newsboys). The children should learn the square mile, degree, cubic foot.

4. EXPRESSION.

Make models of the boats of Columbus and make or show one of a modern steamship, and compare to see how much more dangerous an ocean voyage was then than now. Show use of plant and animal life in decoration, then let the children make designs of their own from conventionalized forms. Experiment with printing, engraving, and pottery, with concave and convex glasses, and with making pendulums. Trace by means of pictures and descriptions the evolution of the different inventions of this period as they

have known them in the epochs before. For example, Hiawatha's picture writing, the Persian, Greek, Roman, mediæval writing.

READ: Longfellow, The Builders, The Old Clock on the Stairs,
and The Building of the Ship.

Whittier, The Shoemaker.

Whittier, The Frost Spirit.

Longfellow, The Windmill.

Tennyson, Break! Break! Break!

SING: There's a Ship on the Sea, *St. Nicholas Song Book*.

VI. Social Life.

1. THE STORY.

So many people living in each house, and the houses so close together that people had a neighborly feeling for each other. Much outdoor life also resulted from cramped quarters. Great fairs, processions, plays (mysteries from the sacred history, and comedies, for which the subjects, costumes, masks, etc., were arranged by artists). Music: vocal solos and quartettes, orchestra, etc. Ball-playing. At social gatherings conversation, rather than story-telling, less eating and drinking than in former times, courtly speech and polished manners, individuality in dress and accomplishments. The idea of caste less strong than formerly; education the test for good society. Sense for shades and tints of color very acute. Beauty in all decorations and furnishings.

In social life at this age music was exceedingly prominent, and should be emphasized in the work of the grade. The music used should be drawn from the best composers. The following songs are suggested:—

Von*Weber, The Boat Song. Franklin Square, No. 1. .

Pippa's Song (Browning), air, Lohengrin.

Schubert, Hark, Hark, the Lark.

Schumann, Slumber Song (air).

Schubert, The Traveller's Evening Song. Franklin Square,
No. 6.

Sweet and Low.

Wagner, Prize Song from The Meistersinger (air).

Photographs both of Carlo Dolci's and of Raphael's St. Cecilia may be shown here. (See *Munsey's Magazine*, July, 1895, for an article entitled The Patron Saint of Music.)

Angels, by Fra Angelico. Singing Angels from Raphael's Madonna del Baldacchino. Reliefs by Donatello and Della Robbia mentioned for former period may also be used here; also, by Donatello, Cherubs from San Antonio altar, Padua.

2. COMPARISON.

Compare the social life of this period with that of previous epochs and the present.

3. MEASURE.

Study of musical instruments to get principles of construction. Show by measurements. Mixing colors in certain proportions to get shades and tints.

4. EXPRESSION.

Act out stories studied. Solos, duets, and quartettes of children to entertain the school. Repeat poems learned, tell stories studied.

VII. The State.

1. THE STORY.

Genoa free. King and queen in Spain. Elective principle, representative assemblies. Growth in freedom as to classes. Effect of the invention of gunpowder.

2. COMPARISON.

Compare with the past and present. Have the children learn as much as they are able of our own city government.

3. EXPRESSION.

Have the children show by description, drawings, etc., what their ideas are of the different forms of government familiar to Columbus; of our own government.

READ: Longfellow, The Bell of Atri.

SING: Star Spangled Banner.

America.

Columbia, the Gem of the Ocean.

VIII. The Church.

1. THE STORY.

Religious basis of art. Cathedrals in Pisa and Venice. Pictures, decorations, plays, processions, ceremonials, miracle plays. Music. Religious zeal of Columbus. Different ways in which this affected his life (marriage, La Rabida, ideas of geography and astronomy, etc.). Dante's *Divine Comedy* should be used, as to its cardinal points, in this connection.

Show photographs of Guido Reni's St. Sebastian and St. Michael, Raphael's Transfiguration and Deliverance of St. Peter, Leonardo da Vinci's Last Supper, Michael Angelo's ceiling of the Sistine Chapel and Last Judgment. Contrast the idea embodied in the last named, with that expressed by the Greek and German conceptions of the Three Fates.

For pictures of illuminated manuscripts see *Allgemeine Geschichte der Litteratur*, G. Karpeles.

2. EXPRESSION.

Build cathedrals with blocks, make models of them, draw, copy with rings and sticks, and paint designs

used in the interior decorations and windows. Carve figures and designs based upon plant and animal life, in both soft materials and wood.

RALEIGH.

A. ANALYSIS OF CHARACTER.

The story of Raleigh should be used in connection with that of Columbus; Raleigh being a type-character of the later Renaissance, Columbus of the earlier. In general, this character may be used along the lines followed in the study of Columbus.

In the period of development for which Raleigh stands, the activity of the child is much what it was during the Columbus epoch, sturdy and propulsive. It is, however, directed somewhat differently. During the Columbus epoch the child's interest is rather in the large and impersonal aspects of life. In the Raleigh epoch these things attract him still, but to a less degree than the more human interests. The seething manifold life about him is full of interest to him. Questions of motive and conduct appeal to him. Individuals as individuals begin to have a certain meaning. Human life in its literary and historical records delights him more than ever before. He begins to understand, to some extent, his inheritance. The great world of knowledge opens up before him. It is often here that the first serious passion for knowledge seizes the child, and he determines to be "educated."

B. ETHICAL AIMS.

These are implied in the foregoing analysis. The child's new sense of kinship or relationship with all

the world, both near and far, past and present, should be intensified by constant references in specific cases to our debt to the past and our obligations to all the present world about us. The historical interest should be fed with all the material it demands, and the child led to see, so far as he can, how all previous races have lived and died that he might have the fulness of life he enjoys, the security, the material comforts, and the intellectual delights. And the point of honor may be pressed, as to the obligation involved in the acceptance of life in these present days. The children should define this obligation for themselves, in detail, the teacher perhaps emphasizing the duty of learning what the past has to teach us for the guidance of our own lives. The interest in allegory is especially strong during this period, as it satisfies the exploring instinct. Hence the story of the *Faerie Queene* (in very broad outlines) may be used effectively, to carry forward the chivalric spirit into the moral realm, and to supplement upon the positive side the more negative influence of the *Divine Comedy*.

After studying the *Faerie Queene* the children may be asked to write or draw their own representations of the virtues.

C. MATERIAL.

This period in the world's history, especially in England, seems to be just such a period as that described in the life of the child. Raleigh himself represents the enthusiasm for learning characteristic of the time, together with the practical energy which made his learning effective. A college-bred man, a soldier, a courtier, an explorer, a colonizer, an author, he is in

many respects the best embodiment of the many-sided spirit of his age.

The main features of Raleigh's life should be familiar to the children: the story of the cloak, to show his courtliness, of his introducing the potato into England, to show his practical sense, of his assistance to the Huguenots, to show his chivalric instincts to help the oppressed. Andrews, *Ten Boys* (Story of Roger).

The literature of the period should be freely used, especially that of Spenser. The story of the Faerie Queene will be found well told in Wright, *Children's Stories in English Literature*. The stories of some of Shakespeare's plays may be used from Charles and Mary Lamb, *Tales from Shakespeare*, as edited for the use of schools in Ginn's Classics for Children Series.

REFERENCE BOOKS:—

Winsor, Christopher Columbus.

Fiske, Discovery of America.

Irving, Columbus.

Castelar, Life of Columbus (Century Magazine).

Stories of Industry (Educational Publishing Co.)

Hale, Stories of Invention.

Burckhardt, Civilization of the Renaissance.

Lacroix, Manners, Customs, and Dress of the Middle Ages.

Lambert, Two Thousand Years of Guild Life.

Shaler, First Book in Geology.

Lacroix, The Arts in the Middle Ages and the Period of the Renaissance.

Lacroix, Science and Literature in the Middle Ages and the Period of the Renaissance.

Smith, English Guilds.

Symonds, History of the Renaissance.

Grimm, Michael Angelo.

Lillie, Story of Music and Musicians.

Reade, The Cloister and the Hearth.

Clemens, Joan of Arc.

Gardiner, Students' History of England.

Mrs. Jameson, Legends of the Madonna.

Mrs. Jameson, Legends of the Saints.
Ball, Starland.
Ball, Story of the Heavens.
Howitt, Birds and Flowers.
Howitt, Midsummer Falls.
Lubbock, Flowers, Fruits, and Leaves.
Poulton, Colors of Animals.
Allen, Colors of Flowers.
Buckley, Fairyland of Science.
Wright, Children's Stories of Great Scientists.
Meneffe, Stories from the Masters.
Walford, Gilds.
Nestor, Ponce de Leon, Columbus Gallery.
Timbs, Wonderful Inventions.
De Vinne, Invention of Printing.
Hamlin, Legends of Detroit.
Farmer, History of Detroit and Michigan.
Oliphant, Makers of Florence.
Irving, Alhambra.
Wright, Children's Stories of English Literature.
• Harrison, In Story-Land.
Marco Polo's Travels.
Frye, Primary Geography.
Werner's Primary Geography.
Tarr, Elementary Physical Geography.
Simmons, Physiography for Beginners.
Radcliffe, Schools and Masters of Painting.

PICTURES : —

Michael Angelo, Portrait of himself, Moses, David.
Leonardo da Vinci, Portrait of himself, Head of Medusa,
Adoration of the Magi.
Brozek, Columbus at Court of Ferdinand and Isabella.
Piloty, Columbus on Deck of the Santa Maria.
Bastian Lepage, Joan of Arc Listening to the Voices.
Gainsborough, The Blue Boy.
St. Mark's in Venice.
Ducal Palace in Venice.

- Views of Venice.
- Views of Genoa.
- Views of the Alhambra.
- Pictures of the Sea.
- Van der Lyn, Landing of Columbus.
- Berchino, Columbus at the Convent.
- Riffenstein, Columbus and the Egg.
- Frémiet, Joan of Arc (Statue).
- Maillart, Joan of Arc.
- Mme. de Châtillon, Joan of Arc before a Shrine.
- Michael Angelo and Rosso, Three Fates.
- Titian, Children (from the Assumption).
- Statue of Columbus. Geneva.
- Statue of Columbus. Boston Art Museum.
- Canova, Statue of Columbus.
- Van Dyck, Princess Mary and the Prince of Orange.
- Greuze, 'The Broken Pitcher. Louvre.
- Brown, Castles in Spain.
- Whole and Details of Amiens Cathedral.
- Lichfield Cathedral.
- Peterborough Cathedral.
- Wells Cathedral.
- Canterbury Cathedral.
- York Cathedral.
- Ely Cathedral.
- Melrose Abbey.
- Westminster Abbey.
- Pradilla, Surrender of Granada.
- Roe, Trial of Joan of Arc.
- Guido Reni, St. Sebastian.
- Raphael, Sistine Madonna, Madonna of the Chair, St. Peter in Prison, Deliverance of Peter, Portrait of himself.
- Correggio, Moon Goddess.
- Kaulbach, Lady Moon.
- Rogers, The Lost Pleiad.
- Thorwaldsen, Day and Night.

THE PURITANS.

Grade B 4.

Ages of children, ten to eleven years.

A. ANALYSIS OF CHARACTER.

The strong tendency of children of this age to argue, to cling to an opinion already formed, to stand obstinately by the word of some one regarded as authority, is one phase of the incipient desire to know the truth. To consider the children as merely opinionated does not go far enough below the surface.

In child-character, as well as in that of a nation, the epoch of effervescence in intellectual life, of large speculations, of tingling possibilities and of boundless ambitions, is likely to be followed by a period of self-control and repression, under the influence of a dominant ideal which the excursive period brought to consciousness. This ideal is sternly translated into conduct, and sits in judgment upon all the life. If the individual ever reaches this stage of Puritanism it is after a period of high-wrought intellectual activity, such as that typified by Raleigh. It is the Roman period come again, but with a richer content.

B. ETHICAL AIMS.

To cultivate in the pupil the desire to know what is true and right, and when known to do it, should be the aim here. The idea of personal responsibility is dominant, and should not be weakened by the teacher, but only made as intelligent as possible. The children

should recognize a duty, not only to obey the dictates of conscience, but to give conscience all the light possible. In this connection the derivation of the word conscience may be used to call attention to the fact that it means "knowing things together," seeing all sides of a question, and then making up one's mind what is right to do. The Puritan intensity of moral concentration which brought the conscience to bear upon the smallest details of life may safely be encouraged in the children. Their purity of life, dignity and courtesy of manner, seriousness and reserve in conversation, are direct results of this tendency to unify life about their ideal.

C. GENERAL STATEMENT OF MATERIAL.

As type of the Reformation the epoch of Puritanism in England, culminating in the exodus of the Pilgrims to America, is the appropriate study for this stage of development. The real characters for this period are, in England, Cromwell, Milton, and Bunyan; in Holland, William of Orange; and in America, Miles Standish.

From the references the outlines of Puritan history in England, and after their flight to Holland, may be obtained by the teacher. The debt of American civilization to Holland should be noted, especially the fact that the Pilgrims learned in Holland the practical possibilities of a free government, free speech, and free schools, afterward to be embodied in our institutions. The thrift of the Dutch, their inventions and industries, also had an influence upon the early life of the colonies. The history of Holland itself should be taught in out-

line, with especial reference to the character of William of Orange.

Before the life of the Puritans in America can be intelligently studied, the earlier inhabitants of the country must be considered, the Indians (including the mound-builders), the cliff-dwellers, and the Aztecs, with some account of a few of the earlier explorers and colonists, as Cortez, De Soto, and John Smith.

But even farther back than this we must go to understand fully the struggle of the Pilgrims for life upon the continent. With their coming to America began almost a repetition of what had taken place in the progress of the race up to this time in the conquest of the physical environment on one side, and the differentiation of social institutions on the other. But there was this difference: those who repeated the race struggle had the advantage of physical, mental, and moral inheritances from all the ages of the past. The acquisitions of the race were theirs in idea, if not in expression. If they had not the tools, they knew the value of them and how to make them. If they had no schools, no central government, they were not without the desire to establish the one, or the knowledge of the benefits and dangers of the other. What sort of country was this to which they had come? To understand thoroughly its physical conditions, we need to know the life-history of the planet as well as that of our own continent; to know its constituents, land, water, and atmosphere; to determine its form, structure, and position, and the various forces acting upon it; to learn how man has measured the earth for his own convenience, as by parallels, etc.; to know (our own continent

used for illustration) what the mountains are, what carved the valleys, how the deposits of minerals and metals came to be placed where they are, what gives us the fertile soil in one place, the barren in another; to locate the great life-regions of plants and animals, to classify the animals of the continent in their order of development, and to study one member of each class. In this way, we may, perhaps, come to see by what means, through the ages, this continent was prepared to be the home of our people.

In the study of the life-history of the planet, many myths that were to the people of early times what scientific facts are to the present may be given, with their interpretations, such as the various stories of creation; of Apollo, Perseus, Phaeton, Niobe, Diana, Atlas, and Hercules; of the wind (Orpheus, Mercury, The Piper of Hamelin, Pan); of the sun, moon, planets, and constellations. The best literature on these subjects should be used. For the present scientific view, current magazines will often furnish what is needed. In poetry *The Fossil Fern* and *The Finding of the Lyre*, by Lowell, may be used, and Ovid's *Story of Phaeton*. Appropriate pictures or statues illustrating the stories have been mentioned in work for previous grades, as Guido Reni's *Aurora*, Watt's *Orpheus*, *Niobe*, etc.

The following general plan will indicate the line of work which may be pursued in carrying out this idea:—

I. **THE WORLD STORY:** (a) The life-history of the solar system; the birth of our planet; the story of the moon; the cooling of our planet. (b) The world as a whole: its form, measurements (by parallels and meridians), and motions; the distribution of heat; winds; the earth's surface (proportion and distribution of land and water); continents; oceans; comparison of hemispheres.

II. **THE CONTINENT STORY:** Continent making, or how North America rose from the sea (the main points in the life-history); position; shape; boundaries; comparative size. Surface as a whole: structure and drainage. Special study of primary high-land as a basis for comparison in study of other parts of the

continent and other continents (vivid picture of characteristic scenery, extent, slopes, elevations, as source of drainage, as determining climate, as affecting productions, as affecting human life; the home, social life, industrial life, division of states, means of communication, movement of pioneer life, cities; moral and æsthetic influence). Special study of Mississippi River (traced from source to mouth, showing details of descent, climate, vegetation, industrial life, people, scenery). Lakes of different kinds. Coast line (kinds, relation to human life). Climate, products (inorganic and organic), people, early races, present races, political divisions.

READ: Selections from *Hiawatha*, *Woods in Winter*, *Daybreak*, by Longfellow; *Autumn*, *The Pumpkin*, by Whittier; *June and Winter* (from *Vision of Sir Launfal*), by Lowell; *Carpenter*, *Travels through North America with the Children*; *King, Rocky Mountains and Pacific Slope*.

III. OUR ANCESTORS' STORY (Puritans as illustration):

1. The Puritans in England.

Story of Ezekiel Fuller in *Ten Boys*, by Andrews.

Study of some representative English cathedrals.

Story of Cromwell, adapted from Hawthorne's story of Cromwell.

Story of Bunyan and his *Pilgrim's Progress*.

The Pilgrims in England.

PICTURES:—

Children of Charles I., by Van Dyck.

Cromwell at Ripley Castle, by R. Lehman.

Cromwell dissolves Parliament, Benjamin West.

2. The Pilgrims in Holland.

Story of William the Silent.

Accounts of people and country of Holland from such books as Dodge's *Hans Brinker* and *The Land of Pluck*, Henty's *By Pike and Dike*, De Amicis's *Pictures in Holland*.

Show Rembrandt's *The Mill*, and *the Night Watch*; Potter's *Bull*, and *The Prairie*; Van der Velde, *Landscape*, and *Dutch Ships of War*; Ruysdael's *A Storm along the Dykes of Holland*; Peter de Hooch's *Morning Toilet*; Van Dyck's *Portrait of Van Dyck as a Youth*.

3. The Pilgrims in America.

Study of appearance, clothing, home, physical environment, school, state, social, religious, and industrial life. (Much of the material for this study may be abstracted by the children from Longfellow's *Courtship of Miles Standish*.)

Read selections from *Hiawatha*, *The Courtship of Miles Standish*, and Mrs. Hemans's *The Landing of the Pilgrims*.

In nature-study the children are directed in their observation of the different planets and the moon. They study also the expansion and contraction of solids and liquids; evaporation and condensation; classification of plants and animals for different zones, selecting types from each zone; protective coloring; kinds of rocks, as aqueous, igneous, fossiliferous, and stratified; and the making of soil.

1. MEASURE.

A great deal of work with number and form is necessary to give clear conceptions of the work in this grade. Such topics as the deposits of the coal age, the effects of the ice age, of heat, the measurements of the earth, method and distribution of products, etc., call for the application of standards for measuring area, bulk, capacity, length, position, weight, heat, time, etc., and require the accurate use of such fundamental mathematical processes as long division, fractions, and percentage.

2. EXPRESSION.

The expression work grows out of both the historical and the science study. For the first, description and narration illustrated by drawings may be used. So far as science is concerned, the expression work consists in drawing diagrams, maps, and pictures, in making models of the solar system, in constructing the material used in

experimentation, in drawing and painting the plants and animals studied and imaginary subjects from the study of the myths. Considerable reproduction would grow out of the historical side of the work; as, copying drawings of the implements of the mound-builder, and pictures to show the life of the Puritans.

BOOKS OF REFERENCE:—

- Motley, Rise of the Dutch Republic.
- Motley, History of the United Netherlands.
- Grattan, Netherlands.
- Campbell, The Puritan in His Three Homes.
- Green, History of the English People.
- Guizot, History of England.
- Von Ranke, A History of England.
- Fiske, History of the United States.
- Winchell, Walks and Talks in Geological Fields.
- Gunning, Life History of Our Planet.
- Ball, Starland.
- Buckley, A Short History of Natural Science.
- Buckley, Fairyland of Science.
- Buckley, Life and Her Children.
- Fiske, Excursions of an Evolutionist.
- Lubbock, Flowers, Fruits, and Leaves.
- Cox, Tales of Ancient Greece.
- Gayley, Classic Myths.
- Guerber, Myths of Greece and Rome.
- Hartland, Science of Fairy Tales.
- Baring-Gould, Curious Myths of the Middle Ages.
- Bunce, Fairy Tales, Their Origin and Meaning.
- Lang, Custom and Myth.
- Dodge, The Land of Pluck.
- Coffin, Old Times in the Colonies.
- Poor, Sanskrit and Kindred Literature.
- Fiske, The Beginnings of New England.
- Griffis, The Pilgrims in their Three Homes.
- Griffis, Influence of the Netherlands.

Brooks, Story of the Red Children, and Story of American Indians.

Byington, The Puritan in England and New England.

Husted, Stories of Indian Children.

Boughton, Sketching Rambles in Holland.

Guerber, Story of the Thirteen Colonies.

Schwatka, In the Land of Cave and Cliff Dwellers.

Holbrook, Round the Year in Myth and Song.

Wright, Children's Stories in English Literature.

Emery, How to enjoy Pictures.

Burroughs, A Year in the Fields.

Earle, Home Life in Colonial Days.

De Amicis, Holland.

Carpenter, Travels through North America with the Children.

King, Rocky Mountains and Pacific Slope.

King, De Soto and his Men in the Land of Florida.

Guerber, Story of the English.

Mowry, First Steps in the History of our Country.

BOOKS THAT MAY BE READ BY THE CHILDREN: —

Dodge, Hans Brinker.

Ruskin, King of the Golden River.

Eggleston, Primary History.

Dodge, Stories of American History.

Our World Readers.

Scribner's Geographical Reader.

Larkin Dunton, The World and Its People, Book III.

Jane Andrews, Seven Little Sisters.

McMurry, Pioneer Stories.

Wright, Seaside and Wayside.

Longfellow, Hiawatha.

Scudder, Fables and Folk Stories.

Field, A Little Book of Profitable Tales.

Mara Pratt, Story Land of Stars.

Kingsley, Greek Heroes.

Francillon, Gods and Heroes.

Hawthorne, Tanglewood Tales.

Ouida, The Dog of Flanders.

PICTURES: —

Pinwell, Piper of Hamelin, Beguiling the Rats, Beguiling the Children.

Kaulbach, The Pied Piper.

Beyschlag, Orpheus.

Watts, Orpheus.

Leighton, Orpheus, Return of Persephone.

Remington, Priscilla.

Wein, Embarkation of the Pilgrims.

Millais, The Princes in the Tower.

Mesdag, On the Beach at Scheveningen.

Menton, Orphan Girls. Amsterdam.

Bakhuyzen, Driving Cattle Homeward. Holland.

Rembrandt, The Mill, The Night Watch.

Van Dyck, Portrait of Charles I.

Van Dyck, Portrait of himself as a Youth.

Van Dyck, Baby Stuart.

Rembrandt, Portrait of himself.

Rembrandt, Portrait of Rembrandt's Mother.

Rembrandt, Saskia.

Guido Reni, Aurora.

Raphael, Hours of the Day and Night.

Romano, Apollo and the Muses.

Tintoretto, Forge of Vulcan.

Velasquez, Forge of Vulcan.

Thorwaldsen, Day and Night.

F. D. Millet, Ceres.

Watts, Orpheus and Eurydice.

Corot, Orpheus.

Cellini, Perseus.

Canova, Perseus.

Burne-Jones, The Seasons.

Hunt, June Clouds.

Le Rolle, By the Riverside.

Turner, Marine Views.

Inness, Marine Views.

English Cathedrals.

Millais, Princess Elizabeth in Prison.

- Boughton, Pilgrims Going to Church, Pilgrim Exiles.
 Boughton, Compact in the Cabin of the Mayflower.
 Boughton, Landing of Pilgrims.
 Richards, Evangeline, and Gabriel.
 Van Dyck, Children of Charles I.
 Rothermel, Landing of the Pilgrims.
 Holsall, The Mayflower in Plymouth Harbor.
 Regnault, Automedon with the Horses of Achilles.
 Guercino, Sleeping Endymion.
 Bayes, Departure of the Mayflower.
 Blake, Canterbury Pilgrims.
 Lahimette, The Harvest.
 Lancret, Autumn.
 Robert, The Reapers.
 Breton, Blessing the Wheat, Recall of the Gleaners, Song of
 the Lark.
 Millet, The Sower, The Woodchopper, The Angelus.
 Adsee, The Haymaker.
 Jacobson, Landscape in Winter.
 Dupre, Milking Time.
 Powell, De Soto discovering the Mississippi.
 Schreyer, A Halt in the Oasis.
 Ruysdael, Marine View, Landscape with Windmill.
 Habbema, The Mill.
 Potter, Bull.
 Jaque, The Sheepfold.
 Niobe Group. Naples.
 Neal, Oliver Cromwell visiting Milton.

RELIEFS AND STATUES:—

- Jean of Bologna, Mercury. Bargello, Florence.
 Orpheus, Eurydice, and Mercury. National Museum, Naples.

THE DEVELOPMENT OF THE NATION.

Grade A 4.

Ages of children, ten to eleven years.

A. ANALYSIS OF CHARACTER.

The children are alert to all going on around them. They are eager for action, movement, affairs. They wish to know what lies behind and beneath what they see and know. Stories of history are more interesting than fairy stories. The beautiful is not so attractive as the stirring scenes of history or the everyday happenings of a period of public excitement. The hero of this period is the man of action — the maker of history, the inventor, or the business man.

B. ETHICAL AIMS.

The effort here should be to develop the potentialities of the child through the inspiration of ideals of achievement of great ends gained through coöperation, and of helpful participation in the daily activity of community life.

C. GENERAL STATEMENT OF MATERIAL.

In this grade the development of our nation is traced from early colonial days down to the present, in its general outlines, with especial reference to industrial and social progress in the conquest over physical environment, acquisition of territory, and the making of the nation.

A broad, rapid view of the whole period of national development is demanded here, not only logically, but as a matter of prac-

tical desirability, since so many children leave school very soon after this grade is reached.

The study of industrial progress, inventions, etc., should in every case grow directly from the last half-year's study of physical conditions upon the American continent. Each invention should be connected with the particular obstacle overcome, as the steam-engine with structure, the steamboat with drainage, etc.

In the general survey of this period will be considered the national heroes, not alone those of war, but of industry as well; Washington, Franklin, Jefferson, Webster, Lincoln, Harriet Beecher Stowe, Whitney, Fulton, Morse, Field, Edison, and Tesla. Some of these characters should be studied for the lessons their lives teach, as well as for the distinctive acts for which they are known, others merely for their important acts.

For beautiful pictures of ideal family relationships, for historical material and descriptions of many portions of our country, the poem of *Evangeline* may be recommended for this grade. Many selections may be used for reading material. Richard's picture of Gabriel and *Evangeline* should be shown.

In conducting this general survey of our national development, the following outline will be found suggestive:—

I. THE STORY OF OUR OWN NATION.

1. Discoveries: Spanish, by Columbus and De Soto; English, by Cabot; French, by Cartier and Champlain; Dutch, by Hudson.

2. Settlements: Roanoke Island, Raleigh; Nova Scotia, the French; Jamestown, John Smith; Plymouth, Miles Standish; Philadelphia, William Penn; New Amsterdam, the Dutch.

3. The nation: (a) strife for freedom—Franklin, Washington, Jefferson, Webster; (b) growth—the pioneers, Boone, Lincoln; (c) aids to a closer union—inventions, such as Fulton's steamboat, Whitney's cotton-gin, railroads, telegraphs, and other uses of electricity; (d) territorial expansion.

II. OUR NEIGHBORS: Canada, Mexico, West Indies, Central America. Discovery, settlement, growth, present condition, relation to United States.

III. PHYSICAL CONDITIONS AS AIDS AND HINDRANCES: Review of carboniferous and glacial ages to explain favorable and unfavorable conditions. Reasons for the fertility of Mississippi Valley, for the aridity of the Western region, for the sands of Florida, the lakes of the Northwest, the cañon rivers. Study of the continent as to outline, structure, drainage, climate, productions, inhabitants, political divisions, institutional life, and cities.

Read Washington's Farewell Address, the Declaration of Independence, selections from Franklin's Poor Richard's Almanac, from Lincoln's Gettysburg address, and from Webster's Bunker Hill orations; some of Whittier's Songs of Freedom, Mrs. Stowe's Uncle Tom's Cabin, Saxe's How Cyrus Laid the Cable, Holmes' Washington Elm, One Hoss Shay, Broomstick Train, and Washington Tea Party; Longfellow's Psalm of Life, Evangeline, Paul Revere's Ride; Whittier's Barbara Frietchie, Seed Time and Harvest, The Shoemakers, The Lumbermen, The Huskers, The Corn Song, Barefoot Boy, and Among the Hills (selections); Irving's Rip Van Winkle; Helen Hunt's March, and Spinning; and selections from Bryant's The Prairie, On the Banks of the Hudson, and The Return of the Birds.

The progress of the country should be traced through its struggles for freedom, self-government and preservation of the Union, not, however, over-emphasizing the war element in our history. The acquisition of new territory should be noted. Especial stress should be laid upon the growing unity of the people through improved facilities for communication, etc. The growth of monopolies at equal pace with the progress of industrial and commercial development is an important feature of the period. The children should especially begin to realize something of the results of industrial progress in bringing within the reach of all such means

for the enrichment of life as newspapers, magazines, and books, public libraries and art galleries, cheap but beautiful reprints of great pictures and statuary, the beautifying of public and private property, opportunities for inexpensive recreations and pleasures, etc. Attention should also be drawn to what public and private philanthropic effort has accomplished in the provision of public baths, vacation schools, playgrounds, etc. Such realization is of the highest ethical value, as stimulating the individual to make these advantages his own.

1. NATURE-STUDY.

In connection with the study of Franklin and Morse, some simple experiments in electricity should be performed, and electrical standards of measurement explained. In connection with Fulton, the subject of coal-formation should be reviewed from the preceding grade, experiments in the use of steam power described, and measurements explained. All machinery invented during this period should become familiar in principle, its power or capacity should be measured by the appropriate standards, and comparisons drawn in detail between the work accomplished by machinery now and that formerly accomplished by hand or horse power.

The following subjects may be treated with greater or less detail at this point: igneous rock—granite, quartz, feldspar, mica. Erosion—chemical, physical; erosive agents. Sedimentation—solution (salt, lime), suspension (sand, clay); oceans, rivers, icebergs. Aqueous rock—sandstone, limestone, animal deposits. Effect of heat—gases, winds, liquids, evaporation, solids, disintegration of rock, motion, power. Study of coal—ferns of carboniferous period, ferns of to-day, life-history of coal. Iron and copper—mining, properties, relation to invention. Steam—prin-

ciple of steam-engine, application to machinery. Magnetism — mariner's compass, terrestrial magnetism. Electricity — current, static, Atlantic cable, telegraph. Cotton — life-history, cotton-gin. Life — relation of plants to minerals; relation of plants to animals.

2. MEASURE.

Such comparison and measuring involves the use of all the ordinary standards of measurements, and of many not commonly known, such as those for gas, electricity, steam power, etc. The measurements involved in the construction and use of the thermometer and barometer should also be studied.

3. EXPRESSION.

Some of the more important inventions should be reproduced so as to show the principle involved; and pictures, diagrams, or maps used to illustrate all material. Patriotic speeches should be made by the children, and the national songs sung. The stories of Miles Standish and Rip Van Winkle should be acted.

The study of our nation is followed in this grade by a brief study of the other nations of North America, as our nearest neighbors; their physical environment, industrial status, form of government, and relation with us.

BOOKS THAT MAY BE READ BY THE CHILDREN:—

Montgomery, *Beginner's American History*.

McMurry, *Pioneer Stories*.

Larkin Dunton, *The World and its People*, Book IV.

Scribner's *Geographical Reader*.

Longfellow, *Evangeline*.

Robinson *Crusoe*.

Ruskin, *King of the Golden River*.

Kingsley, Water Babies.
 Franklin, Autobiography.
 Eggleston, Primary History.
 Eggleston, Stories of Great Americans for Little Americans.
 Wagner, Pacific History Stories.
 Hiawatha, Story of the Four Winds.
 Dodge, American History Stories.
 Our World Reader, No. IV.
 Coe, Our American Neighbors, No. IV.

BOOKS OF REFERENCE:—

Shaler, Story of our Continent.
 Shaler, The United States of America.
 Fiske, History of the United States.
 Bryce, American Commonwealth.
 Dana, Handbook of Geology.
 Spofford, Library of Historic Characters and Famous Events.
 North America, Vols. I. and II.
 Reclus, America.
 Mulhall, Industries and Wealth of Nations.
 Hayes, Kane, or Greeley, The Arctic Regions.
 Fiske, The Discovery of America.
 Higginson, A Larger History of the United States.
 Thwaites, Epochs in American History.
 Hart, A. B., American History told by Contemporaries.
 Gregg, David, Makers of the American Republic.
 Chaunning, Student's History of United States.
 Austin, Standish of Standish.
 Allen, Choir Invisible.
 Winchell, Walks and Talks in Geological Fields.
 Much of the best material will be found in the current magazines.

PICTURES:—

Bouguereau, Wheedling.
 Peel, An Unexpected Meeting.
 Greuze, Young Girl.
 Meyer Von Bremen, The Wounded Lamb.
 Leighton, The Music Lesson.
 Borckman, Mozart and his Sister.

Il Rosso Fiorentino, Angel playing on the Lute.
Pictures showing the evolution of inventions and industries.
Millet, The Gleaners.
Breton, The Gleaner.
*Dupré, The Haymakers.
Lhermitte, The Harvest.
Vuillefroy, Return of the Herd.
Burne-Jones, Spring, Summer, Autumn, Winter.
Daubigny, Spring.
Corot, Spring.
Millet, Angelus.
Millet, Potato Planting.
Millet, The Sower.
Schneider, Mozart and his Sister.
Dicksee, The Child Handel.

HISTORIC PLACES:—

Plymouth Rock.
Longfellow's Homes in Cambridge and in Portland.
Standish House, Duxbury.
Paul Revere's House, Boston.
Christ Church, Boston.
Old Bell Tower, Lexington.
Minute Man, Concord.
Old Liberty Tree, Boston.
Bunker Hill Monument.
Mount Vernon.
Capitol and White House.
Washington Elm.
Washington Monument.
Franklin's Birthplace.
Lincoln's Home, Springfield.
Lincoln's Statues in Boston and Chicago.

HISTORIC EVENTS:—

Powell, De Soto discovering the Mississippi.
Weir, Embarkation of Pilgrims.
Rothermel, Landing of Pilgrims.
Bayes, Departure of Mayflower.

Boughton, Signing the Compact in the Cabin of the Mayflower.
 Neal, Watt discovering the Power of Steam.
 Boughton, Pilgrim Exiles.
 Trumbull, Battle of Bunker Hill.
 Trumbull, Battle of Princeton.
 Trumbull, Surrender of Burgoyne.
 Trumbull, Surrender of Cornwallis.
 Trumbull, Signing of Declaration of Independence.
 Leutze, Washington crossing the Delaware.
 Faed, Washington and Lafayette at Mount Vernon.
 Carpenter, First Reading of the Emancipation Proclamation.

PORTRAITS : —

Stuart, George Washington.
 Martha Washington.
 Benjamin Franklin.
 Paul Revere.
 Thomas Jefferson.
 John Hancock.
 Robert Fulton.
 Samuel F. B. Morse.
 Abraham Lincoln.
 H. W. Longfellow.
 William Penn.
 Captain John Smith.

RELIEFS AND STATUES : —

Rogers, Bronze Doors of the Capitol at Washington.
 Ghiberti, Gates at Florence.
 Statues or busts of great Americans.

Grade B 5.

A. GENERAL STATEMENT OF AIM AND MATERIAL.

In the grammar grades the child can grasp complexer relations than in the grades below, and hence is able to make a more elaborate study of the subjects considered. In order that he may understand his own life, he must

know the influences working around him; to comprehend these he must know their history. So, first, his own country is studied to see what elements enter into the life of the present. The development of present social institutions is considered, not as a whole as before, but as seen in different sections of country which show diversity of life and development under diversity of conditions. This study should form a basis from which, comprehended more clearly by further study, he may to some extent forecast the future, and so secure such advantages for himself and others as this means may afford.

After the study of our own country we view other countries and continents as our neighbors. The study of our neighboring continents in their historical and sociological aspects will mean always three things: A consideration (1) of our indebtedness to them in the past, (2) of our relations to them in the present, and (3) of the probable advantage or disadvantage on both sides of maintaining these relations in the future. Its scientific phase will consist of studies in the mutual action and reaction of man's inheritances and his environment.

B. ETHICAL AIMS.

Children at this stage of development crave that which seems to them practical, namely, what will help them to future success. Their standard of value of any subject studied is its probable contribution to their equipment for a career. Industrial life seems to them to be of the greatest importance. The emphasis which they tend to throw upon this side of life is greater than

it should be. There is need for giving the children a true idea of what is really practical. They need to see that the practical is not merely that which ministers to success in business life, but that which ministers to our highest development and usefulness; and that while competition may enable one to accumulate more outward possessions, the aim of coöperation is the enlargement of the self.

For the ethical standard Hawthorne's Great Stone Face may be used throughout the term. The sequence of ideals shown through Mr. Gathergold (commercial), Mr. Blood and Thunder (military), Old Stony Phiz (statesman), The Poet (abstract goodness), Ernest (love and help for humanity), gives an opportunity to show that all below the highest is unsatisfactory. For ourselves as individuals we cannot be satisfied with anything less than the best.

In dealing with the material, the United States in its organic relations shows the advantage of coöperation over competition, and helps to establish a standard of patriotism for each as part of the community, of the state, of the section, and of the nation. The nation is made up of individuals. The standard of the nation rises and falls according to the standard of individuals.

Statues, pictures, buildings, songs, poems, stories, or other literary forms belonging to, or representative of, each section are used in connection with the study of it. In the study of the New England section, as connected with the structure, the children may read Hawthorne's Great Stone Face, Jordan's Story of a Stone; with the drainage, Longfellow's Mad River in the White Mountains, or Whittier's Merrimac River. The climate may be shown through Snow-Bound and the prelude to Among the Hills, by Whittier. These poems are also valuable as showing New

England life. In literature there is an embarrassment of riches. If with each section the noted writers of that section are connected, and wherever available their writings are used, the children will come to have an appreciation and knowledge of these writers, and a love for good literature, greater than can be gained in any other way.

In taking up the United States as a whole, the following subjects may be considered: Acquisition of territory. Industrial regions as changing with growth. Government. Story of our flag. Possessions. Resources. Belts of plant regions, distribution of animals, minerals. General idea of where productive, transforming, and exchanging industries are carried on. The most noted American authors (the work being carried on in connection with the work on the different sections).

Pictures of national interest, of great historical events and distinguished people. (Pictures in the Capitol and Library at Washington, at Plymouth, pictures of Presidents, etc.) The children should keep note-books in which are collected pictures connected with their study of authors, the history and geography. (Railroad guides furnish good material for the geography, besides magazines.) Music, national airs.

Compare the United States with other countries as to area, population, industries, products imported and exported, amount of commerce, wealth, and means of communication (railroads, telegraph and telephone lines, lake and ocean vessels, etc.).

Each section is to be studied under the following outline:

1. Geological history (brief statement) to account for

present physical conditions (as in New England, the number of lakes, character of rivers, soil, etc.).

2. Significant physical features. State boundaries on the physical map. Significance of names.

3. Original settlers and present inhabitants. Personal characteristics. How large a factor in national life. First settlements. Centres of influence. Present influential regions or cities, and reasons for their supremacy.

4. Development of home life from beginning to present. *a.* Family ties. *b.* Environment (natural and artificial). *c.* Structure of the house (its adaptation to environment, its beauty, etc.).

5. Development of school life. *a.* Famous institutions. *b.* Noted teachers. *c.* Influence of American ideals. *d.* Influence of foreign methods.

6. Development of social life. *a.* Modifying influences. *b.* Distinguishing characteristics (brief statement).

7. Development of industrial life. *a.* Great inventors and their inventions. *b.* Other causes of development. *c.* Centres of industry and trade.

8. Development of state life. *a.* Political institutions (as reflecting general intelligence and as disseminating general intelligence). *b.* Characters of political history. *c.* Centres of political influence. *d.* Historic places, monuments, etc.

9. Development of church (as affected by and as affecting other social institutions).

The presentation should be through the concrete wherever possible.

The sections of our own country studied are as follows

(the name of the character or characters connected with its early development, and designed for special study, being placed after the name of the section).

These characters are to be studied with varying fulness of detail according to their representative quality or the significance of their lives in the development of the section.

New England — Miles Standish.

Middle Atlantic — Henry Hudson, William Penn.

South Atlantic — John Smith and Lord Baltimore.

Gulf — Oglethorpe.

South Central — Boone, Robertson, Sevier.

North Central — Clark, Putnam, Marquette.

Southwestern — Houston.

Western and Rocky Mountains — Whitman, Rogers, and Clark.

North Pacific — Robert Gray.

South Pacific — Sutter.

South America is considered first as to its physical features, then as to the inhabitants found there by the early discoverers and conquerors. Afterward the states as they exist to-day are studied. The people of these states are studied under the topics used before, as character, appearance, clothing, home, etc.

1. NATURE-STUDY.

The children should study more systematically than in previous grades the typical plants and animals in their own environment to see the relation of structure to function and environment. This should form a basis for understanding differences in the life of the different sections.

The evolution of plant life is followed through the study of algæ, fungi, lichens, mosses, liverworts, ferns, club mosses, horsetails, evergreen trees, and flowering plants.

Animal life is traced through the amœba, sponge, coral, starfish, sea-urchin, clam or oyster, butterfly or moth, frog, fish, bird, and mammal.

2. MEASURE.

To make clear the comparisons suggested and the development of the different sections in the various lines mentioned, a great deal of use is made of form and number. The children should know processes with fractions and decimals and simple work in percentage. This work requires also the application of the knowledge of denominate numbers gained in the grade below.

3. EXPRESSION.

Maps, diagrams, charts, models, drawing, painting and modelling of nature-work, description and narration both oral and written.

BOOKS THAT MAY BE READ BY THE CHILDREN:—

- McMurry, Pioneer History Stories.
- Wright, Stories from American History.
- Jane Andrews, Ten Boys.
- Jane Andrews, Stories Mother Nature Told.
- Montgomery, American History.
- Newell, Botanical Reader.
- Hale, A New England Boyhood.
- Larcom, A New England Girlhood.
- Judson, The Young American.
- Carver and Pratt, Our Fatherland.
- Burton, The Story of Our Country.
- Eggleston, Great Americans for Little Americans.

Johonnot, Stories of Our Country.

Wagner, Pacific History Stories.

Wright, Seaside and Wayside Readers.

Shaler, Story of Our Continent.

Dunton, The World and its People (Vols. III. and IV.).

Bryant:

Monument Mountain.

The Fringed Gentian.

Twenty-second of December.

The Tides.

Song of Marion's Men.

Scene on the Banks of the Hudson.

Song of the Sower.

Death of the Flowers.

March.

The Prairies.

The Green Mountain Boys.

Whittier:

The Merrimac.

Skipper Ireson's Ride.

Barefoot Boy.

Red Riding Hood.

The Kansas Emigrants.

Barbara Frietchie.

What the Birds Said (poem on slavery).

Songs of Labor.

Faneuil Hall.

The Last Walk in Autumn.

The Mayflowers.

The Witch's Daughter.

Mountain Pictures.

Trailing Arbutus.

Chicago.

Centennial Hymn.

The Pumpkin.

To Pennsylvania.

The Pass of the Sierras.

Longfellow :

Hiawatha.
Evangeline.
Skeleton in Armor.
Village Blacksmith.
Arsenal at Springfield.
Old Clock on the Stairs.
Building of the Ship.
Miles Standish.
Paul Revere's Ride.
The Builders.
Charles Sumner.
The Poet's Calendar.
The Slave in Dismal Swamp.
The Lighthouse.
The Tide Rises, the Tide Falls.
Wreck of the Hesperus.
Mad River.
A Summer Day by the Sea.
Daybreak.
Snow Flakes.
The Ladder of St. Augustine.
Poems of Places.

Lowell :

Wendell Phillips.
The Vision of Sir Launfal (selections).
The Heritage.
Stanzas on Freedom.
The First Snow-Fall.

Holmes :

The One Hoss Shay.
The Broomstick Train.
The Last Leaf.
Army Hymn (may also be sung to the tune of Old Hundred).
International Ode — Our Fathers' Land (tune, America).
The Ploughman.

Irving:

Description of the West.

Rip Van Winkle.

Legend of Sleepy Hollow.

Sidney Lanier, Corn, The Symphony (Selections).

Geo. W. Cable, Burning of St. Michael's, Beautiful Willamette.

Hawthorne, The Great Stone Face.

John Burroughs, Birds and Bees — essays.

Sangster, The Old Sampler.

REFERENCE BOOKS:—

C. D. Warner, The Great Northwest.

Mateaux, A Wonderland of Work.

Channing, The United States of America.

Bryce, The American Commonwealth.

Chase and Clou, Stories of Industry.

Fiske, The Beginnings of New England.

Wright, The Industrial Evolution of the United States.

Shaler, United States of America.

• Andrews (Scribner's Magazine), A History of the Last Quarter Century in the United States.

Wright, Industrial Evolution in the United States.

Higgins, New Guide to the Pacific Coast.

Warner, Our Italy.

Wright, Stories of American Inventors.

Harper's Magazine, Spanish-American Republics.

Parkman, Discovery of the Great West.

Morley, Song of Life.

Lubbock, Beauties of Nature.

Lubbock, Flowers, Fruits, and Leaves.

W. Hamilton Gibson, Sharp Eyes.

Reclus, The Earth and its Inhabitants.

PICTURES:—

Photographs of American and South American Scenery.

Views of important cities.

Pictures of the characters studied.

Trumbull, Battle of Princeton.

Trumbull, Battle of Bunker Hill.
 Trumbull, Surrender of Burgoyne.
 Trumbull, Surrender of Cornwallis.
 Trumbull, Signing the Declaration of Independence.
 Trumbull, Death of General Montgomery.
 Rothermel, Landing of the Pilgrims.
 Boughton, John Alden and Priscilla — The Courtship.
 Boughton, Pilgrim Exiles.
 Boughton, Pilgrims Going to Church.
 Boughton, Priscilla.
 Weir, The Embarkation of the Pilgrims.
 Bayes, The Departure of the Mayflower.
 Millet, The Angelus.
 Millet, The Sower.
 Millet, The Gleaners.
 Millet, Sheep-Shearing.
 Le Rolle, The Shepherdess.
 Landseer, Members of the Humane Society.
 Dupré, The Haymakers.
 Dicksee, Swift and Stella.
 Countess Potoka.

Pictures in the Congressional Library and the Boston Public Library.

MODERN ARCHITECTURE:—

The "Sky Scrapers" of New York and Chicago.
 Pictures of historic houses, trees, etc., given in the Perry Catalogue.

RELIEFS AND STATUES:—

Donatello, Cherubs from San Antonio altar, Padua (six groups).
 Victory (Nike) decorating a Trophy.
 Winged Victory.
 Bust of Lincoln.
 Bust of Washington.

The *Art and Architecture of the World's Fair* (30 vols., Barrie, publisher), or any other good illustrations of the same subject, may be used in this grade.

Grade A 5.

A. ANALYSIS OF CHARACTER.

The children of this grade care for what is practical for them personally. Competition is a prominent characteristic. They are easily contented to do what "everybody does" if it is in line with their success, and are disinclined to hold to a higher moral standard. They are interested in tracing phenomena back to their causes. They care to know the relations of things, and do not willingly follow a subject unless the relations are clear. The desire for boisterous physical exercises seen in children before this grade seems to be turning to a desire for energetic action, but with some purpose besides play.

B. ETHICAL AIMS.

The easy morality of children of this age needs to be quickened by helping them to see that the roots of events lie far back in history, that nothing comes by chance, to-day is the product of perhaps a remote past. We do not obtain good results without effort; if we wish them, we must provide for them.

"The key of yesterday I threw away,
And now to-day,
Before to-morrow's fast closed gate,
Helpless I wait.
In vain to pray, in vain to sorrow;
Only the key of yesterday unlocks to-morrow."

C. GENERAL STATEMENT OF MATERIAL.

After studying the development of our own and of our sister continent, the child turns to Europe, that

continent which was the earlier home of our race, and the cradle of our civilization. The study of Europe is begun at this period not only because of its past relations to us, and the rich heritage of experiences, inventions, and arts that we now hold from it; but because our closest contact in the present, industrially, commercially, and socially, is with Europe.

Here we first study, as before, the physical environment with which our ancestors came in contact. We then study, in the order of historic development, the political divisions of Europe. The history of each country is studied in its broad outlines, with especial emphasis upon the social institutions as affecting and as affected by ourselves. That which has been most influential and that which still yields most pleasure in the lives of great men, in science, inventions, and arts, is made familiar to the children. The time for this work is so limited and the material so abundant that the greatest care will be necessary in selecting the material for study. Institutional life should be presented through the concrete wherever possible.

So far as the end of education is concerned the master-works in architecture, sculpture, painting, literature, and music will yield better results than detailed descriptions of rivers, capes, etc. The physical features are not to be neglected, but the purpose for which they are studied should be kept in mind, and the time and attention allowed them should be determined by this. Our commercial relations with Europe are important, and affect our daily living; but not less important is the constant interchange of ideas. The children, having once obtained a glimpse of our relations, will

be interested to follow future developments for themselves.

In the study of the continent as a whole only the most significant features should be noticed, such as structure and outline in general, drainage, climate, and productions. Any details which are necessary may be connected with the study of the political divisions.

The children should have considerable power in interpreting maps by the time they reach this grade.

The study of each political division, taken in order of its historical development, should cover the following points:—

1. General view of physical features, to indicate the relation of this section to the whole continent, and their probable effect upon the people, industries, etc.

2. A study of the character, appearance, and clothing of the people.

3. A short history of the development of the people, politically.

A study of the other social institutions: home, school, social life, industrial life, church.

The central thought in the political history should be the development of political freedom. In the study of each political division everything which illustrates the actual life of the time, such as products, inventions, utensils, ornaments, statuary, pictures, stories, poems, etc., should be shown by the teacher, in an endeavor by all possible means to make the civilization of the country real to the children. They should fairly live in each country as they study it. The topics need not necessarily be taken in this order, and often the institutions are so interrelated that they cannot be easily separated. The work should be in the concrete; the life of some representative man may show the meaning of the state at a certain period better than a lecture on the period would. A picture of a gladiatorial contest in the Coliseum would mean more than a bare statement.

At every point comparison should be drawn between the physical features, political history, and civilization

of the country studied, and the same aspects of other countries of the past and of the present, especially our own.

1. MEASURE.

Considerable attention to measure will be needed in order that the children may gain correct ideas of the physical environment, cost of production or manufacture and its effect upon our home market, size of country and population to the square mile as compared with similar facts for our own and other countries, the percentage of illiteracy, the extent of commerce, cost of the government and of individual living, taxation, wages, profit and loss on the export and import of products.

2. NATURE-STUDY.

Gravitation.

Weight.

Density of bodies.

Balances.

Levers.

Levers in the human body.

Sun-dial.

Pendulum.

Clock.

Specific gravity.

3. EXPRESSION.

The ideas gained in regard to the civilization of each country should be expressed in all ways possible, as, for example, by drawing maps, writing, making collections of pictures, building temples and cathedrals and

painting historic ornaments. Lists of pictures, statues, etc., to be used for this purpose, are given below.

The following outline will be found useful:—

I. THE PREPARATION OF EUROPE FOR CIVILIZATION.

Brief view of the geological changes determining the present physical conditions of Europe. Causes of the geologic epochs. Present appearance, taking significant structural regions, and showing influence of these upon outline, drainage, climate, productions, and history. Early inhabitants: river-drift men, cave-men, Iberians, Aryans. Aryans as wandering tribes. General view of the order of development of civilization. Poems and prose writings, to show the wonder and grandeur of nature, the patience of nature to perfect life. Early myths showing the vague and unscientific nature of the explanation of natural phenomena. Pictures of grand, majestic, and beautiful scenery. Music: hymns of praise, songs with majestic movement. Use of form and number to induce definite concepts of length and causes of geologic ages, the building of the continent, time of early inhabitants, etc.

II. CIVILIZATIONS OF EUROPE THAT HAVE CONTRIBUTED LARGELY TO OUR OWN.—GREECE (to illustrate plan of study).

1. Outline of boundaries placed on physical map. Decide the physical conditions and give important details. Significance of physical features in history, location of historic places and important cities.

2. View from the Acropolis at Athens, its geographical significance, the explanation of its beauty.

3. Historical development traced through concrete illustrations. Legendary period, Trojan war, Lycurgus and Solon, battles of Thermopylæ and Marathon, Pericles, Alexander the Great, Fall of Corinth, Destruction of the Parthenon, Byron and the Greeks, the revival of the Olympian games, Greece to-day. Trace our indebtedness to them and our present relations. Suggestions as to the future of Greece.

4. Story of the *Iliad* and *Odyssey*. Some important myths and their interpretation.

5. Study of sun-dial and water-clock.

6. Pictures or sculpture showing the finest specimens of architecture and statuary. Greek life and story as depicted by artists of other countries (as David, Leighton, Alma Tadema, Coomans, and Flaxman). Pictures showing scenery in Greece.

7. Proportion used by Greeks in temples, vases, statues, etc.

8. Music: of a cheery and vivacious nature.

9. Expression: show plan of Athens by means of sand table, placing temples on Acropolis, locating agora, stadium, etc. Build the Parthenon with blocks, draw and paint historic ornament, mould vases, make chariots, illustrate note-books by drawing and painting.

III. STATES OF EUROPE IN COÖPERATION WITH THE UNITED STATES.

IV. STATES OF EUROPE HAVING LITTLE SIGNIFICANCE FOR THE UNITED STATES.

STATUARY:—

Laocoön.

Niobe Mother. Florence.

Minerva. Vatican, Rome.

Michael Angelo, Moses. Rome.

Jean de Bologna, Mercury. Florence.

Venus de Milo. Louvre, Paris.

Ariadne. Vatican.

Apollo Belvedere. Vatican.

Nike of Samothrace.

RELIEFS:—

Elgin Marbles.

Nike tying Sandal.

Nike placing Trophy.

Della Robbia.

PICTURES:—

Raphael, Sistine Madonna.

Raphael, Transfiguration. Vatican.

Michael Angelo, Three Fates.

Michael Angelo, Last Judgment. Sistine Chapel, Rome.

Michael Angelo, Ceiling of Sistine Chapel.
 Leonardo da Vinci, Last Supper. Milan.
 Millet, Angelus. Carnegie Collection, Pittsburg.
 Carlo Dolci, Mater Dolorosa. Dresden Gallery.
 Reynolds, Angel Heads. National Gallery, London.
 Roe, Joan of Arc.
 Pradilla, Surrender of Granada.
 Spengenberg, Luther introduced to the Home of Frau Cotta.
 Notte, Hannibal crossing the Rhone.
 Jules Lecompte du Nouy, Demosthenes.
 Checa, Roman Chariot Race.
 David, Death of Socrates.

PHOTOGRAPHS : —

Rialto, Venice.
 Bridge of Sighs, Venice.
 Piazzetta S. Marco, Venice.
 Cortile del Palazzo Ducale, Venice.
 St. Mark's, Venice.
 Grand Canal, Venice.
 Campanile S. Giorgio, Venice.
 Doge's Palace, Venice.
 Porta S. Andre, Genoa.
 Statue of Columbus, Genoa.
 S. Lorenzo, Genoa.
 Notre Dame, Paris.
 Boulevards, Paris.
 Church of Madeleine, Paris.
 Le Nouveau Louvre, Paris.
 Cathedral, Amiens.
 Cathedral, Cologne.
 Giotto's Tower, Florence.
 Ghiberti's Gates, Baptistery, Florence.
 Palazzo Vecchio, Florence.
 Temple of Vesta, Rome.
 Tarpeian Rock, Rome.
 Castle and Bridge of St. Angelo, Rome.
 St. Peter's, Rome.
 The Forum, Rome.

Palace of the Caesars, Rome.
Coliseum, Rome.
Arches of Constantine and Titus, Rome.
Campo Santo, Pisa.
Cathedral, Baptistery, and Leaning Tower, Pisa.
Pulpit in Baptistery, Pisa.
Parthenon, Athens.
Cathedral, Milan.
Cathedral, Burgos.
Cathedral, York.
Bay of Naples.
Lion of Lucerne.
Guild Halls at Brussels.
Canals in Holland.
Edinburgh Castle.
Westminster Abbey.
Parliament Houses, London.
Milan Cathedral.
Cologne Cathedral.

STORIES SUGGESTED : —

The Golden Fleece.
Scylla and Charybdis.
Aurora.
Iliad.
Odyssey.
Prometheus.
Æneas.
Virginia.
Horatius.
Stories from Hawthorne's Wonder Book.
Siegfried.
William Tell.
Story of Roland.
Joan of Arc.
Robin Hood.
Robert Bruce.
Harold.
King Arthur.

Caesar.

William the Silent.

Don Quixote's Adventures (selected).

Irving, Descriptions from Alhambra.

• William Lisle Bowles, On the Rhine.

Yonge, Book of Golden Deeds. Selections.

Baldwin, Nibelungen Stories.

The Nixy's Chord. *Cosmopolitan*, September and October, 1895.

The Hero of Haarlem.

Rogers, There is a Glorious City in the Sea.

The Dog of Flanders.

BOOKS FOR TEACHERS:—

Von Falke, Greece and Rome.

Guerber, Myths of Greece and Rome.

Gayley, Classic Myths.

Lübke, History of Art.

Von Reber, Ancient Art.

Schliemann, Mycenæ and Tiryns.

Hanson, The Land of Greece.

Blümmner, Home Life in Ancient Greece.

Wilkinson, Greek College Course (Speech of Demosthenes).

Hawthorne, The Marble Faun.

Mahaffy, Pictures of Greece.

Church, Stories of the Old World.

Gardner and Jevons, Grecian Antiquities.

Manning, Italian Pictures.

Preston and Dodge, Private Life of the Roman.

Forbes, Rambles in Rome.

Lytton, Last Days of Pompeii.

Macaulay, Lays of Ancient Rome.

Howells, Italian Journeys.

George Eliot, Romola.

Bryant, Translation of Iliad and Odyssey.

De Amicis, Holland and its People, Spain, Studies of Paris.

Allen, Great Cathedrals of the World.

Symonds, Renaissance in Italy.

Ruskin, Stones of Venice.

Conway, Flemish Artists.

Owen Jones, Grammar of Ornament.
 Gibson, Sharp Eyes.
 Morley, Song of Life.
 Morley, Life and Love.
 Lubbock, The Beauties of Nature.
 Fiske, Excursions of an Evolutionist.
 Fiske, Darwinism.
 Poulton, The Colors of Animals; their Meaning and Uses.
 Hamlin, Pictures from English Literature.
 Wright, Children's Stories from English Literature.
 Harrison, New Calendar of Great Men.
 Bolton, Famous Voyagers and Explorers.
 Smiles, Men of Invention and Industry.
 Kingsley, Roman and Teuton.
 Du Chaillu, The Viking Age.
 Dippold, The Ring of the Nibelung.
 Frost, The Wagner Story Book.
 Adams, Civilization during the Middle Ages.
 Lacroix, Manners, Customs, and Dress of the Middle Ages.
 Burckhardt, Civilization of the Renaissance.
 Gardiner, Short History of England.
 Taine, History of English Literature.
 Rogers, Story of Holland.
 H. R. Haweis, My Musical Memories.
 Holmes, Our Hundred Days in Europe.
 Meyers, General History.
 Goldsmith, The Traveller.
 V. Hugo, Les Misérables.
 Motley, Rise of the Dutch Republic.

BOOKS THAT MAY BE READ BY THE CHILDREN:—

Hawthorne, Wonder Book.
 Hawthorne, Tanglewood Tales.
 Baldwin, Story of Siegfried.
 Baldwin, Story of Roland.
 J. Andrews, Ten Boys.
 Butterworth, Zigzag Journeys.
 Martineau, Peasant and Prince.

Pyle, Men of Iron.
Doyle, The White Company.
Brooks, Chivalric Days.
Bolton, Girls who became Famous.
Bolton, Boys who became Famous.
Dodge, Hans Brinker.
Scott, Ivanhoe.
Dodge, The Land of Pluck.
Ewing, Jan of the Windmill.
Hughes, Tom Brown at Rugby.
Henty, The Lion of St. Mark's.
Henty, Wulf the Saxon.
Coe, Modern Europe.
Cervantes, Don Quixote.
Irving, The Alhambra.
Pratt, Northern Europe.
Taylor, Boys of Other Countries.
Scott, Tales of a Grandfather.
Kingsley, Greek Heroes.
Lamb, Adventures of Ulysses.
Lamb, Tales from Shakespeare.
Ruskin, King of the Golden River.
Dickens, Child's History of England.
Dickens, Dombey and Son. (As arranged for children.)
Yonge, Histories of European Countries.
Yonge, Heroes of the Seven Hills.
Aguilar, Days of Bruce and Vale of Cedars.
Church, Stories of the Old World.
Baldwin, Stories of the Olden Time, The Horse Fair.
Bulwer Lytton, Last Days of Pompeii, and Rienzi.
Frost, Wagner Story Book.
Bodley Books.
Vassar Girls.
Plutarch for Boys and Girls.
Hamlin, Pictures from English Literature.
Wright, Stories from English Literature.
Barr, A Bow of Orange Ribbon.
Butterworth, Little Arthur's History of Rome.

Grade B 6.

A. ANALYSIS OF CHARACTER.

Besides the spirit of competition, investigation, commercial enterprise and desire for finding relations characteristic of the preceding grade, there is manifested now a still greater desire for relating and comparing knowledge, for generalizing and organizing. On the positive side this appears as a desire for authoritative knowledge; on the negative side as a tendency to scepticism.

B. ETHICAL AIMS.

The aim here should be to show that science confirms history, that the ideals which have lived through history are the real. The commercial standard is for the day, the ethical is for all time. Facts, books of reference, experiments in science, the making of history as seen in current events, should be used to satisfy the desire for authority and relationship.

The material for this grade is abundant because of the contrast between the old ideas and the new, and the opportunity of seeing the effect of the new upon the old in the awakened enterprise of some of the oldest countries. Differences in ways of living, in religious, political, and industrial ideals, bring out clearly our advantages, and also prevent the narrow conceptions which a study of people with ideas more nearly like our own might tend to form.

C. GENERAL STATEMENT OF MATERIAL.

In this grade we study the scene of the earliest development of part of our race. We view Asia to

learn the significance of the past and the conditions of the present, and to anticipate the probable future relations between this neighbor and ourselves. We study historically the physical features of Asia, to see what was provided by nature before nature was modified by man, to anticipate the adaptations which will be necessary, and the difficulties which must be overcome. On this physical basis we construct the history of each political division, in its order of development, and become familiar somewhat in detail with its past and present civilization.

Although the children by this time should have considerable power in filling with life the form and coloring of a map or the word symbols in a description, the concrete in the form of a story, poem, or the colored pictures now so easily obtained, will be of the greatest value.

On this physical basis we trace the life that appeared on the continent, the rise, culmination, and decline of ancient nations, and their influence upon the civilization of our own. This study is followed by a view of the political divisions as they exist at the present time.

History, as it is being made in Asia as well as in other continents, requires daily following. Hence text-books and even the current magazines will be found not altogether satisfactory. The daily paper (although unfortunately, not always reliable) is a necessity in carrying on this study.

Comparisons should be made with continents studied before. All possible aids should be summoned, as pictures, books, maps, products, to secure definite conceptions of the life of the people. Number and form should be employed wherever exactness is desirable. Translations of some of the Asiatic writers (especially Persian and Indian), as well as the writings of European and American travellers, will help to make conceptions vivid. All of the various means of expression should be used.

The children should be given some of the old Sanskrit root words common to different branches of the race.

1. MEASURE.

For definiteness of conception, form and number must be used constantly. To compare life in Asia and America, the children must have a definite knowledge of many things which before they have known but vaguely. In comparing home life, the children inquire into the size and cost of the lots upon which their homes are built; they ask what determines the value and advantage of different sites. They learn the comparative value and cost of different materials used in building, and cost of constructing buildings of different kinds. They learn the source and cost of various furnishings, especially those from Asia. The children obtain samples of materials and facts as to cost wherever possible, and these furnish the basis for the understanding of the conditions of their own living and comparisons with and relation to the life in Asia. The teacher furnishes the facts for the problems when the children are unable to obtain them. (This calls for the use of the daily newspaper.) Such work, of course, makes necessary a knowledge of fractions, decimals, percentage, interest, measures and standards, and business forms for exchange.

2. EXPRESSION.

Maps to show physical features, products, comparative freedom of government, development in history; drawings and paintings to show the conventionalizing of natural forms for the purpose of art; reproduction of

art forms typical of different peoples, and designing from this basis; planning of typical houses and designing of furnishings; drawing and making suggested by the science work; oral and written language.

3. NATURE-STUDY.

Stones and soil.

Pressure of liquids.

Atmospheric pressure.

Barometer.

Pump.

Molecular action.

Circulation in animals.

Capillarity in plants.

Study of flowers and fruits cultivated in our own country but native to Asia, as the rose, chrysanthemum, tulip; the apple, pear, plum.

The following outline is proposed as a guide in the planning of work for this grade.

1. EARLY CONDITION OF ASIA.

1. Brief account of the geological history of Asia. Present appearance as to physical features.

2. Study of soils: power to absorb and retain heat, power to absorb and retain moisture, relation of soils to plant and animal life. Study of air: weight, pressure, compressibility. Work of a stream: wearing, carrying, depositing.

3. Habitat of races. General idea of the different races; their distribution; the identification of Europeans and Americans.

4. Asiatic myths of creation. Bible and other accounts of the flood. From the idea of a common origin should grow the feeling of toleration and brotherhood. Literature to illustrate this point.

5. Pictures which illustrate the early myths of creation (as *Days of Creation* by Burne-Jones, *Mirrors of Time* by F. McGregor, etc.).

Pictures which illustrate the idea of brotherhood. Pictures which give definite ideas of scenery in Asia.

6. Comparison with other continents studied to give definite ideas of relative extent, elevation, fertile and barren regions, drainage, climate, and productions. Study of percentage. Maps to show geological changes and physical features.

7. Diagram of races; maps to show location.

II. DEVELOPMENT OF ANCIENT CIVILIZATIONS.

1. Migration of the Aryans. Early development of Hindoos. Development of people in Tigris and Euphrates Valley. Hebrews. Persians. (The study of Cyrus the Great may be used to unify this work and be made to cover the essential points to be abstracted.) The Chinese and Japanese.

2. Location of civilizations on physical map. Study of details of physical features, where significant.

3. Some of the old myths of Aryan origin, with their interpretation. Selections from the Vedas and stories from the Mahabharata. Show ideals of the Persians from the Zend Avesta. Ideals of the Hebrews from the Bible. Show character of the Chinese and Japanese through literature. Sohrab and Rustum used for extended study (Matthew Arnold's version used principally).

4. Typical illustrations from Hindoo, Persian, Chinese, and Japanese art, in architecture, ornamental designs, pottery, fabrics, etc.

5. Music that simulates Oriental effects; airs from Peer Gynt Suite by Grieg, and Persian Garden by Lehman, On Wings of Song and Suleika (allegro) by Mendelssohn.

6. Comparisons, by use of number and form, to give definite ideas of extent, population, resources, cost of living, relation to the United States.

7. Study of barometer: construction, use. Study of pumps: lifting, force, construction, uses. Study of flowers native to Asia: rose, tulip, chrysanthemum.

8. Place outline of countries on physical map. Draw, paint, make, mould, illustrate by pictures the institutional life and natural environment. Describe and illustrate the work in nature-study.

III. CONDITION OF ASIA AT THE PRESENT TIME.

1. Brief history of the English in Asia, of the French, of the Germans, of the Russians. Show influence on social conditions. (Use concrete illustrations, as Warren Hastings as type of English viceroy.)

2. Show extent of influence of the European nations in area. Compare extent of influence and command of resources. Relation to the United States. Countries not affected by Western civilization to any appreciable extent. Significant physical features of countries studied.

3. Literature (suitable for children) by Europeans or Americans tinged by influence from Asia, as Kipling's stories, Lafcadio Hearn's stories, Moore's *Lalla Rookh*, extracts from *Light of Asia* by Arnold.

4. Pictures of Asiatic life or subjects by European or American artists.

5. Study of liquids: pressure, buoyancy, capillarity in plants, circulation of blood.

IV. PROBABILITIES AS TO THE FUTURE.

Follow changes in boundaries, possessions, and use of inventions, as modifying life and products. Follow influence of and results upon the United States.

Through magazines and newspapers, follow changes in situation in China, Indo-China, Asiatic Russia, and all parts of Asia undergoing modification.

Keep scrap-books of clippings, articles, and pictures showing progress of events.

READING FOR CHILDREN:—

Andrews, Jane, *Ten Boys*.

Bacon, Alice M., *Japanese Girls and Women*.

Bacon, Alice M., *A Japanese Interior*.

Bacon, G. B., *Siam*.

Wise, *Boy Travellers in Arabia*.

Greay, *Young Americans in Japan*.

Vincent, *Land of the White Elephant*.

Steel, Flora, *Tales of the Punjab*.

- Kipling, *Jungle Stories*.
 E. Arnold, *Youth of Buddha, Light of Asia*.
 M. Arnold, *Sohrab and Rustum* (selections).
 Hale, *Arabian Nights*.
 Pratt, *Stories of India*.
 Pratt, *Stories of China*.
 Andrews, *Each and All* (Chinese Girl).
 Pratt, *Story Land of Stars*.
 Miller, *Little People of Asia*.

MAGAZINE ARTICLES:—

- Yan Phon Lee, *Boys and Girls of China*, *St. Nicholas*, Vol. 17, p. 362.
 M. F. Upton, *Chinese Girl Slaves*, *Youth's Companion*, Vol. 64, p. 270.
 C. D. Weldon, *Kites of the Japanese*, *Harper's Young People*, Vol. 15, p. 529.
 R. Wildman, *A New Year's Day in Singapore*, *Youth's Companion*, Vol. 67, p. 7.
 Z. Cocker, *Amusements and Manners in the Celestial Empire*, *Harper's Young People*, Vol. 13, p. 422; Vol. 14, p. 692.
 Adèle M. Field, *An Elephant Hunt in Siam*, *St. Nicholas*, Vol. 18, p. 151. *
 V. Gribayédoff, *A Siberian Tiger Hunt*, *Harper's Young People*, Vol. 14, p. 853.
 A. J. Grant, *A Chinese Junk*, *Youth's Companion*, Vol. 64, p. 388.
 Viceroy of India, *Youth's Companion*, Vol. 66, p. 572.
 Chinese Exclusion, *Youth's Companion*, Vol. 66, p. 292.
 New Treaty with China, *Youth's Companion*, Vol. 67, p. 412.

BOOKS OF REFERENCE:—

- Clark, *The Ten Great Religions*.
 Finch, *Lotus-Time in Japan*.
 Miller, *Little People of Asia*.
 Jane Andrews, *Ten Boys*.
 Benjamin, *Story of Persia*.
 Knox, *Siam and Java*.
 Moore, *Fire Worshipers* (Lalla Rookh).

- Benjamin, Persia and the Persians.
Taylor, Origin of the Aryans.
Fiske, Excursions of an Evolutionist.
Holcombe, The Real Chinaman.
Smith, Chinese Characteristics.
Columan, The Chinese, Their Present and Future.
Yau Phon Lee, When I was a Boy in China.
Norman, The Real Japan.
Rein, The Industries of Japan.
Vincent, Through and Through the Tropics (India).
Arnold, Indian Myths.
Arnold, Light of Asia.
Henty, With Lord Clive in India.
Zimmern, Firdusi's Epic of the Kings.
O'Donovan, Story of the Merv.
Kennan, Siberia.●
Perrot and Chipiez, Chaldea.
Fergusson, History of Architecture.
Lübke, History of Art.
Church, Stories from the East by Herodotus.
Guyot, Earth and Man.
Tomlinson, Rain Cloud and Snow Storm.
King, The Soil.
Gering, A Ride Through Asia Minor and Armenia.
Lafcadio Hearn and Robert Blum, Sketches of Japanese Life.
Taylor, Travels in Central Asia.
Taylor, Travels in Japan.
Taylor, Travels in Arabia.
Taylor, Travels in Siam.
Reclus, The Earth and Its Inhabitants, Vol. II.
Butterworth, Zigzag Journeys in India.
Douglas, China.
French, Our Boys in China.
French, Our Boys in India.
Knox, Japan.
Knox, China.
Knox, Overland Through Asia.
Knox, The Boy Travelers in the Far East.

Knox, Siam and Java.

Rawlinson, Five Great Monarchies of the Ancient World.

Perrot and Chipiez, History of Art (Persia).

Ragozin, Story of Chaldea.

A. M. Fulde, A Corner of Cathay.

Ragozin, Z. A., Story of the Nations Series; Chaldea, Assyria, Media, Babylon, Persia, Vedic India.

Keene, Asia.

PICTURES : —

Sargent's pictures in Boston Library.

Photographs and photochroms of scenery, views of cities, and pictures showing the industries and art of Asia.

Chinese and Japanese pictures.

A collection should be made of objects showing the art and industry of the people of Asia.

Michael Angelo, Moses.

Michael Angelo, Prophets and Sibyls.

Verestchagin, The Taj.

Schreyer, Arabian Outposts.

Schreyer, KabyL.

Schreyer, Arab Sheik Travelling.

Vernet, Daniel.

Tissot, Pictures from the Life of Christ.

Grade A 6.

A. ANALYSIS OF CHARACTER.

The dominant interest in this grade seems to be a desire to know how results are accomplished, how things came to be as they are, and how means can be used to secure certain ends. The pupils are also interested in causes in history, explanations of mechanical processes, descriptions of inventions, and explanations of physiological organs and their functions.

B. ETHICAL AIM.

In order that the dominant interest of this grade may be satisfied the children should be led to see nations in the making, together with the forces, instruments, organs, and laws by means of which they have come to be what they are. The children should discover how a new environment influences an old race, and how an ancient people may be regenerated by the influx of a new civilization. These things should be related to their own lives and to the national life.

C. GENERAL STATEMENT OF MATERIAL.

The remaining continents are studied in this grade after the same plan as that previously used: Africa, the home of probably the oldest civilization, and Australia, the home of the youngest. Here the interest will perhaps be equally divided between the achievements of the older civilization and the progressive development of the younger.

The civilization of the world has now been surveyed in broad outlines, and by this means all the previous study of race development has been reviewed, and each part related to the whole.

MATERIAL.

Africa, Australia, and the islands of the Pacific Ocean in their contrast with our own country, with the literature, art, and related nature-study, furnish good material with which to carry out this purpose.

1. MEASURE.

The work begun in the grade below is continued in

this grade, the purpose being to make clearer the complex relations under which we are living, the interrelation of all life and the necessary coöperation which this involves. The progress from the bare necessities of living to comfort, convenience, and luxury, together with the inventions and industries used in this progress, become familiar through the comparisons made. Those inventions and industries which affect our own living, and may be studied at first hand, as carpeting, papering, plastering, etc., are the ones which may be given the most attention. Business operations (as those involving profit and loss, and interest) coming within the comprehension of the children, should be taught them.

2. SCIENCE.

Light.

The eye. (Structure and care.)

Lenses.

Microscope.

Telescope.

Solar spectrum.

Color.

Camera.

Study plant and animal life with the microscope. (The subjects for study are determined by the material the children bring in.)

The following outline may be followed in the work for this grade: —

I. HOW AN OLD CIVILIZATION WORKED OUT ITS PROBLEM — EGYPT.

1. Physical features of Africa — general view. Details of valley of the Nile.

2. Concrete illustration of each epoch of history from which to abstract the civilization of the time: as pyramids and sphinxes, Moses, temple of Karnak, Cleopatra, the English in Egypt. Compare the institutions, achievements, and instrumentalities of each epoch with our own.

3. Astronomical discoveries and advantages for observation. Study of light: its nature; theories about it. Kinds of bodies: self-luminous, non-luminous, illuminated. Media for transmission: transparent, translucent, opaque. Sources of light: sun, stars, chemical action, mechanical action, friction, percussion. Propagation of light, direction, velocity, shadows.

4. Examples of Egyptian literature showing the ancient Egyptian ideas of life. Selections from: Ruskin's *Ethics of the Dust*; *The Lost Arts*, by Wendell Phillips; *Uarda*, and *An Egyptian Princess*, by Ebers.

5. Study of examples of Egyptian architecture and ornament. Pictures of Egypt by good artists: places, buildings, events, scenery.

6. Comparison with other continents and other countries in order to attain to clear concepts. Mathematical concept worked out by the Egyptians, as shown in their building. Work on areas. Tiling and bricklaying.

7. Maps to show physical features of Africa and position of Egypt. Building or making of Egyptian temple; drawing or painting of columns and historic ornament.

II. OLD NATIONS CRYSTALLIZED AND REGENERATED — BARBARY STATES.

1. Physical features as influencing history; history and present condition; importance.

2. Story of Æneas at Carthage.

3. Study of carpeting.

III. NEW CIVILIZATIONS IN THE MAKING — SOUTHERN AFRICA.

1. History of colonization as compared with our own. What we can learn from colonial history.

2. Detailed study of physical features in order to an understanding of present conditions and a forecasting of the future.

3. Comparisons by use of form and number to give definite

ideas of extent, population, resources, and relation to our country. Study of plastering.

4. Study of reflection and refraction. Study of lenses, of microscope, telescope; structure and use. Study of human eye. Use of microscope in studying plants and animals.

5. Read *The Man Wonderful*, by Allen; selections from the Biglow Papers, Ode read at Concord, Under the Old Elm, An Ode for the Fourth of July, The Fatherland, Stanzas on Freedom, The Present Crisis, by Lowell; *The Moral Warfare and the Poor Voter on Election Day*, by Whittier; *The Progress of Spring*, by Tennyson.

IV. EXPLORATIONS IN CENTRAL AFRICA AND THEIR RESULTS — SAHARA, SOUDAN, AND POLITICAL DIVISIONS.

1. Early explorations; later explorations; plans for opening up the central region; nations interested. (Follow progress by means of magazines and newspapers.)

2. Comparisons by means of form and number for definiteness of conceptions of extent, physical features, resources, and civilizing influences.

3. Read *Timbuctoo* (introductory part), by Tennyson, and *The Palm Tree*, by Whittier.

4. Study of color: scientific; pigmentary; color in nature.

V. EUROPEAN POSSESSIONS IN AFRICA.

What they are. Past history showing causes for present condition. Probabilities for the future.

VI. AUSTRALIA AND THE ISLANDS OF THE PACIFIC.

1. Brief history, mainly with reference to their relation to Europe and the United States. Highest types of civilization studied for comparison with our own.

2. Physical features; resources which affect our country.

3. Ornaments, pottery, and other artistic productions.

4. Study of papering and fencing.

5. Color in art: mosaics and glass; great colorists in painting; artistic color in dress.

REFERENCE BOOKS:—

Hale, *A Family Flight over Egypt and Syria*.

Henty, *The Cat of Bubastes*.

- Knox, Boy Travellers in Australia.
- Fraser, In Stevenson's Samoa.
- Edwards, Pharaohs, Fellahs, and Explorers.
- Edwards, One Thousand Miles up the Nile.
- Du Chaillu, Explorations in Equatorial Africa.
- Du Couret, Life in the Desert.
- Starcke, Primitive Family.
- Stanley, Through the Dark Continent.
- Bolton, Famous Explorers.
- Livingston's Journals.
- Butterworth, Zigzag Journeys, Nile to Holy Lands.
- Thomas Knox, Boy Travellers, Nile to Holy Lands.
- Rawlinson, Story of Egypt.
- Rawlinson, Egypt and Babylon.
- Rawlinson, Five Ancient Monarchies.
- Maspero, Egyptian Archaeology.
- Maspero, Dawn of Civilization in Egypt and Assyria.
- Brown, A Story of Africa.
- Rennet, Diamonds and Gold in Africa.
- Algeria, *Harper's Magazine* (December, '95).
- Playfair, Algeria and Tunis.
- Wendell Phillips, The Lost Arts.
- Owen Jones, Grammar of Ornament.
- South Africa, *Harper's Magazine*, for '95 and '96.
- Wilkinson, Egyptians.
- Bridgeman, Winters in Algeria.
- Du Chaillu, Travels in Africa.
- Reclus, The Earth and its Inhabitants.
- Manning, Land of the Pharaohs.

READING FOR CHILDREN:—

- Living Creatures.
- Story of Phaeton, Gayley's Classic Myths.
- Bolton, Story of Livingston.
- Story of Stanley.
- Vasco da Gama.
- Familiar Animals.
- Ruskin, Ethics of the Dust. (Selections.)
- Uncle Tom's Cabin. (Selections.)

Life of Lincoln.

Æneid, Description of Carthage.

Badlam, Views in Africa. (The World and its People.)

Ebers, Uarda, and Egyptian Princess.

Longfellow, Sand of the Desert in an Hour-Glass.

Mrs. Alexander, Burial of Moses.

Kipling, Jungle Stories.

PICTURES: —

Van Dyck, Flight into Egypt.

Turner, Dido building Carthage.

Herring, Pharaoh's Horses.

Vedder, Questioning the Sphinx.

Raphael, Moses saved from the Nile.

Photographs and photochroms of scenery, views of cities, pictures showing the industries and art of the different countries studied.

Reliefs or statues showing Egyptian art.

A collection should be made of objects showing the industries and arts of the people studied.

Grade B 7.

A. ANALYSIS OF CHARACTER.

Desire for approval is the dominant interest here. This may manifest itself as diffidence for one extreme and egotism for the other. The children like to know how their appearance, dress, and actions impress others. Some can never do their best because of self-consciousness, and others are at their best when they have an audience.

B. ETHICAL AIM.

The great purpose here must be to lead the children out of themselves and their small affairs to a larger view, a view of something vast, organic, and awe-inspiring. Thus both the timid and the bold see them-

selves as a part of something so stupendous that there can be no cause for either fear or over-confidence. On the other hand the child should be led to see the organic relations in nature and institutional life, that he may feel that he is needed to do his share of the world's work, and also that he may feel his responsibility for doing it efficiently.

C. MATERIAL.

To secure the desired end, the children study the life-history of the earth in a scientific spirit, and its present physical features with especial reference to the industrial evolution of man.

The underlying idea kept in view is that of the organic interrelationships of the physical earth. An attempt is made to bring out the the same principle in the succeeding studies of the industrial and social world, and to lead the children easily and naturally to see "the fatherhood of God and the brotherhood of man." The following topics are suggested:—

1. History of our planet.
2. Present structure of the land masses as a whole and of each continent.
3. Drainage, as dependent upon structure of land masses. This involves a study of the ocean as related to history and industry.
4. Climate: general laws determining, and local causes modifying it.
5. Products: (*a*) Inorganic (great regions of mineral deposit, amount and comparative value of different regions, relation to organic products and to man). (*b*) Organic (great regions, whether natural or determined

by man. Causes determining location of these regions, relation to structure, drainage, climate; relation to inorganic products. Coöperation between plant and animal life. Life-histories of typical plants and animals to deduce the relation of structure to function, and of both to environment). (c) Relation of products to man (as supplying both his primitive and his developed needs for food, clothing, shelter, means of communication, and his intellectual, æsthetic, social, and religious demands).

With this work should be connected the study of industrial life as a whole in its development out of the needs of man and the character of his environment. The central thought here is that of an industrial organism, a unity with functioning parts contributory to the activities of the whole; in brief, the idea of coöperation. This should flow naturally from the idea of interrelation so prominent in the study of the physical earth as a whole.

The following outline may be helpful:—

1. Origin (of industries in general, and of each fundamental industry in particular).
2. Growth (historic periods of development, in industries and in each industry, with causes for these periods in the history of the people as a whole, and in the lives of great inventors, explorers, scientists, etc.).
3. Present industrial life. The chief industries of the present are studied as to their origin in human needs, their interrelations with other industries, the scientific principles involved, and the actual succession of processes necessary, the preparation required for entering upon each, the compensation, etc. In this con-

nection the school district should be studied from a business point of view.

1. MEASURE.

Measure must be constantly used in this grade. The children should understand the agreement or coöperation of the world practically, as in the measurement of the earth by latitude and longitude, and the relation of longitude and time; coöperation for the common good, as in taxes and duties, and coöperation for preservation, as in insurance. Training in business forms, methods, and standards should grow naturally out of the study of specific industries.

Sidney Lanier's *Symphony* and Longfellow's *Builders* will be found especially valuable as emphasizing ideals of industrial life. The teacher should lead the children to see for themselves that in industrial life the occupation carried on is directed toward supplying the wants of others. What one gains by it is an equivalent for the work done. It is then directly for others, indirectly for ourselves. All true industry means benefit to ourselves in proportion as we benefit others. The fallacy most common at the present day is that involved in thinking we can benefit ourselves at the expense of others. Through the interrelation of all humanity in industrial life, "the brotherhood of man" is actualized.

2. EXPRESSION.

Drawing of the plants, animals, and minerals studied. Drawing or making, to show the principle involved in different inventions, or to show the evolution of an invention or industry. Maps, diagrams, or devices of other kinds to make clear or express the essential concepts.

Much of the work for this grade is review.

The following outline will guide the teacher in planning the work of this grade:—

I. WHAT NATURE HAS PROVIDED FOR MAN AS DISCLOSED BY THE LIFE-HISTORY OF THE EARTH.

1. Life-history of the earth as a planet, its relation to the solar system. (Nebular theory used principally; theories of See and others noted.) Geological history of the earth in its main outlines. Form, size, motions, latitude and longitude.

2. Great astronomers: their theories with regard to the earth traced from early beliefs to the present time.

3. Study of elements: gaseous, non-metallic, metallic. Compounds: air, water, carbon dioxide, protoplasm. Liberation of elements. Matter: solid, liquid, gaseous. Forces: cohesion, gravitation, centrifugal force, heat. Erosion: physical, chemical. Rock: igneous and sedimentary. Crystals. Water: condensation, evaporation.

4. Use of form and number to give definite ideas of time, distance, comparative size, etc. Longitude and time.

5. Stories of the constellations. Myths of the sun, moon, planets, and seasons. Meteorological phenomena. Read *The Light of Stars* and *The Flowers*, by Longfellow; *Paraphrase of the Nineteenth Psalm*, by Addison; *The Hours*, by Joel Benton; *The Sunbeam*, by Mrs. Hemans; *The Fossil Fern*, *Story of a Stone*, by Jordan; *Selections from Essay on Man*, by Pope.

6. Many pictures used in grades below collected here, as, for example, Raphael's *Days and Hours*, Watts's *Orpheus and Eurydice*, Guido Reni's *Aurora*, Burne-Jones's *Days of Creation*, etc.

7. Music: Choruses from Haydn's *Creation*, *The Heavens* are telling, and *The New Created World*.

8. Children should keep a daily record of temperature, rainfall, dew, time of sunrise and sunset, moon's phases, morning and evening stars. They should mark a shadow stick, and draw and describe experiments.

II. THE EARTH AS A HOME FOR MAN.

1. How the earth was prepared for man: mineral deposits, preparation of soil. Effect of geological agencies. Study of glaciers. Barriers: mountains, deserts, climate. Present structure of the earth as a whole and of each continent. General laws determining climate and local causes modifying it. Interpreta-

tion of weather maps. Means of communication. Water-ways. General plan of drainage of each continent. Products: (a) Ready for use — plants (evolution of plant life, plant areas); animals (evolution of animal life, animal areas). (b) To be transformed. (c) To be exchanged for products of other regions. (d) Relation of products to man as supplying both his fundamental and his developed needs, his intellectual, æsthetic, and social demands.

2. Primitive man: savagery and barbarism, showing development in satisfaction of fundamental needs of food, clothing, shelter, means of communication, and transportation.

3. Use of form and number to give definite ideas of area, relative extent of deposits of minerals, regions of products, action of forces. Study cubic measure, circular measure, board measure.

4. Read: Fiftieth Birthday of Agassiz, by Longfellow; Prometheus Unbound, by Shelley (Scene IV., "Who reigns?"); The Ocean, by Pollock; Solitude, by Byron; Chambered Nautilus, by Holmes; description of octopus by Victor Hugo (Toilers of the Sea); The Wind, by Bryant; The Cloud, by Shelley; Birds of Killingworth, Poet's Calendar, and The Little Birds of the Air, by Longfellow.

5. Pictures of grand scenery, beautiful landscapes, and marine views; and of industrial life.

6. Music: Haydn's Seasons.

REFERENCE BOOKS:—

Winchell, Walks and Talks in Geological Fields.

Wright, Seaside and Wayside, No. IV.

Gunning, The Life History of our Planet.

Drummond, The Ascent of Man.

Kidd, Social Evolution.

Guyot, Physical Geography.

Werner, Geography.

Frye, Complete Geography.

King, The Soil.

Dana, The Geological Story Briefly Told.

Morley, A Song of Life.

Wallace, Animal Kingdom.

Frye, Child and Nature.

Scribner, Our World Reader.
Gibson, Sharp Eyes.
Lubbock, The Beauties of Nature.
Fiske, Excursions of an Evolutionist.
Fiske, Destiny of Man.
Fiske, Darwinism.
Smiles, Men of Invention and Industry.
Mason, Woman's Share in Primitive Culture.
Timbs, Wonderful Inventions.
Stories and Poems for the Children.
The Fossil Fern.
The Story of William Tell.
Sketch of Alexander Humboldt.
Jordan, The Story of a Stone.
Tissandier and Frith, Marvels of Invention.
Burnley, Romance of Invention.
Andrews, Stories Mother Nature Told.
Kipling, Jungle Books.
Whittier, Snow-Bound and Song of Labor.
Longfellow, The Birds of Killingworth.
Ruskin, Ethics of the Dust. (Selections.)
Pratt, The Storyland of Stars.
Stories of Industry, Vols. I. and II., Educational Pub. Co.

BOOKS FOR CHILDREN:—

Abbot, Learning about Common Things.
Buckley, Fairyland of Science.
Cunningham, Letters to Children.
Farmer, Storybook of Science.
Meyers, Lucy H., Real Fairy Folks.
Jak, Professor Johnny.
Faraday, Chemical History of a Candle.
Brewster, M. S., First Book in Chemistry.
Tyndall, Forms of Water.
Marion, F., Balloon Ascents.
Giberne, Agnes, Father Aldur.
De Tonvielle, W., Thunder and Lightning.
Carey, Annie, Autobiography of a Lump of Coal.

- Crosby, W. D., Common Minerals.
- Gibson, J., Chips from Earth's Crust.
- Kingsley, C., Madam How and Lady Why.
- Kingsley, C., Town Geology.
- Hyatt, Alpheus, About Pebbles.
- Giberne, Agnes, World's Foundation.
- Uncle Lawrence, In Search of a Son.

PICTURES : —.

Michael Angelo, Pictures of Creation, from ceiling of Sistine Chapel, Rome.

Burne-Jones, Days of Creation.

Burne-Jones, Seasons.

Raphael, Days, Hours.

Low, Narcissus.

Guido Reni, Aurora.

Other pictures that are appropriate from the grades below.

Grade A 7.

A. ANALYSIS OF CHARACTER.

The dawning of self-consciousness noted in the grade before has developed into a desire for admiration and power. There is greater sensitiveness to beauty, and desire for it in person, dress, and surroundings. There are higher ideals of conduct. The possibilities of life begin to manifest themselves, and the vital impulse toward development appears as a craving for attributes which seem to the children admirable, and as a desire to impress others.

B. ETHICAL AIM.

Without a high ideal of what is possible the tendency here is to work for that which will make a good showing, bring credit, count in promotion. The pupils

should be helped to care to *be*, rather than seem to be, that which is admirable; to believe that in so far as they are truly worthy their lives will tell in influence upon others; and to see that whether one is conscious of it or not, "each is for all and all for each."

C. MATERIAL.

The ideal can be put before the children in the large through the study of the kingdoms of the earth in their rise, culmination, and decline, and in the deposit of good left by each according to the inner life as expressed in outward forms.

Based upon and supplementing the former generalizations as to the physical structure of the earth, and industrial life upon it, arise some further generalizations as to social structure. The civilizations as they have appeared and developed on the earth, having been previously studied in detail, are now classified on the basis of their relations to the upbuilding of the different social institutions. Generalizations are made on the relation between environment and history, the contribution of each people to the present in ideals, institutions, and products, and also their present relations. (Of course great care must be taken that there is no attempt to go beyond the capacity of the children for "the imaginative reconstruction of history.")

As the ideals of a people forecast, and to some extent determine, its development, especially in social structure, its art in the first expression of its ideals is to be particularly noted in this grade. The most important masterpieces of art for each people should become familiar to the children, and should be studied*as fully

as may be possible at this stage of development and in the time allowed. The idea of coöperation is traced for each nation in its art, its religion, its family life, its social customs, etc., and in its government. The children come to see that coöperation is only another name for freedom, and that only in so far as the ideal of coöperation is realized is there industrial and political freedom for the individual or for the race.

This principle of coöperation, of "each for all and all for each," is traced in the social intercourse both of the past and of the present, with reference to its effects upon invidious class distinctions, snobbishness, "envy, malice, and all uncharitableness" in society. Politeness is found to be only an expression of the individual's sense of coöperation as the principle of social life.

The masterpieces of art should include those best known in literature, painting, sculpture, music, and architecture. As the children have become familiar with many in the grades below, this will be mainly review. Some that could not be used by younger children may be brought in here. The method of study in regard to those used before should be changed to suit the more advanced stage of development.

1. MEASURE.

The coöperation which to some degree is found all over the world, enabling those engaged in productive industries to coöperate with those engaged in transforming industries, and all to coöperate to greater advantage through the forms and agents of exchange, demands an insight into business methods and such a fundamental knowledge as would enable one later to engage in any industry, with some knowledge of the

relationships involved and business forms required. The following subjects may be taught: commercial discount, profit and loss, commission and brokerage, taxes, insurance and duties, simple and compound interest, stocks and bonds.

2. NATURE-STUDY.

Sound: cause, transmission, reflection.

Study of human ear.

Musical instruments.

Telephone.

3. EXPRESSION.

Maps of the world as a whole to show by means of colored pictures or other devices, the order of development of civilizations, the growth in freedom of governments, and the development of coöperation through the various means of communication. Reproduction through drawing, painting, and making, of some of the most important inventions and art products of the world, of scenes typical of life in various parts of the globe, and of apparatus for science work. Oral and written description and narration of subjects of study. Written forms for business and social correspondence.

The following outline may be used in planning the work of this grade:—

I. WHAT THE ORIENTAL WORLD HAS CONTRIBUTED IN IDEALS, INSTITUTIONS, AND PRODUCTS.

1. Location of the "cradles" of civilization. Show the adaptation of the physical conditions to the maintenance of a large population. Important hindrances.

2. The rise, culmination, and decline (with causes) of the Egyptian, Assyrio-Babylonian, Hindoo, Phœnician, Hebrew, and Persian civilizations. (To be presented only in main outlines

and in as concrete a way as possible, mainly as review. Sum up the contributions of each people.)

3. Trace the idea of coöperation in commercial dealings. Study simple and compound interest.

4. Review work of grades below on great literary bibles, and give additional points as time permits.

5. Broad view of the art of these nations as an interpretation of the ideals of the people.

6. Classification of sounds; properties of simple tones; nature and origin of sound; transmission of sound.

7. Pictures, illustrating the artistic products, institutional life, and literature.

II. WHAT THE CLASSICAL WORLD HAS CONTRIBUTED.

1. Location of least and greatest areas of Greece and Rome.

2. Review history and show relation to other nations as they were influenced by others or as they impressed others. Their standing among nations. (Sum up the contributions of each people.)

3. Masterpieces of sculpture, painting, literature, and architecture; names of greatest statesmen, writers, artists, etc.

4. Continue study of coöperation in business, profit and loss, commission, taxes, and insurance.

5. Transmission of sound; velocity of sound; reflection of sound; musical sounds (cause, quality, pitch).

6. Expression through making, moulding, painting, drawing, and building has great possibilities in this grade and should be encouraged in every way.

III. THE MEDIEVAL WORLD.

1. The meaning of the "Dark Ages." Meaning of feudalism, its causes and effects. Cause and effect of the crusades. Cause of the Renaissance. Lines of revival. Inventions and their influence. Great discoveries. Great artists. Famous buildings. Rise of modern European states.

2. Masterpieces of literature studied in grades below, reviewed and connected with their proper times and place and author. Others, within their comprehension, studied in the same way.

3. Review cathedrals and trace in a broad way the order of

development. Connect the artists studied through the grades with their time, country, and pictures. Important schools of art. Leading musicians studied in a similar way.

4. Study of commercial discount.

5. Production of sound in different musical instruments: stringed, wind. Tones: concord; discord, chord, melody, harmony. Study of human ear.

IV. THE MODERN WORLD.

1. Important changes in European states. Great names and with what connected. Place of our own country in the onward movement. Cause and results of desire of European states for colonization and acquisition of territory. Cause of recent development in China and Japan.

2. Study of stocks and bonds.

3. Study of the telephone.

REFERENCE BOOKS:—

Mariette, Outlines of Ancient Egyptian History.

Edwards, Thousand Miles up the Nile.

Oxley, Egypt and the Wonderland of the Pharaohs.

Rawlinson, Ancient Egypt.

Baedeker, Egypt.

Petrie, Pyramids and Temples of Gizeh.

Maspero, Egyptian Archæology.

Mariette, Monuments of Upper Egypt.

Brugsch, Egypt under the Pharaohs.

Ebers, Egypt (descriptive, historical, and picturesque).

Erman, Life in Ancient Egypt.

Adams, Valley of the Nile.

Wilkinson, Egyptians in Time of Pharaohs.

Rawlinson, Manners and Customs of Ancient Egyptians.

Poole, Social Life in Egypt.

Manning, Land of the Pharaohs.

Taylor, Origin of the Aryans.

Fiske, Discovery of America.

Poor, Sanskrit and Kindred Literature.

Cox, Mythology of the Aryans.

Lang, Custom and Myth.

Jevons, Antiquities of Prehistoric Aryans.
Caine, Picturesque India.
Bose, Hindoos as They Are.
Speir, Life in Ancient India.
• Butterworth, Zigzag Journeys in India.
Knox, Boy Travellers in Ceylon and India.
Ragozin, Story of Vedic India.
Arnold, Indian Myths.
Stone, Illustrated India.
Hurst, Indika.
Fergusson, Palaces of Nineveh and Persepolis.
Layard and Botta, The Buried City of the East.
Ragozin, The Story of Media, Babylon, etc.
Budge, Babylonian Life and History.
Rawlinson, Five Great Monarchies.
Ragozin, Story of Assyria.
Perrot and Chipiez, Chaldea.
Ragozin, Story of Chaldea.
Dobbins, Idol Worship of the World.
Jones and Sharpe, Handbook of Courts.
Maspero, The Struggle of the Nations.
Benjamin, Persia and the Persians.
Stories of the Nations Series, Story of Persia.
Perrot and Chipiez, Art of Persia.
Wilson, Persian Life and Customs.
Benjamin, Story of Persia.
Mills, Ancient Hebrews.
Paine, Solomon's Temple.
Manning, Those Holy Fields.
Maspero, Dawn of Civilization.
Perry, Greek and Roman Sculpture.
Rosengarten, Architectural Styles.
Tozer, Wordsworth's Greece.
Racinet, L'Ornement Polychrome.
Tuckerman, Vignola.
Von Falke, Greece and Rome.
Goodyear, History of Art.
Guhl and Koner, Greeks and Romans.

- Bishop, Pictorial Architecture of Greece and Italy.
Furtwängler, Masterpieces of Greek Sculpture.
Milligen, Ancient Monuments.
Harrison, Greek Vase Paintings.
Woltmann and Woermann, History of Painting.
Winckelmann, History of Ancient Art.
Gardner, New Chapters in Greek History.
Broughton, Antiquities of Athens.
Flaxman, Greek Costumes.
Jones, Grammar of Ornament.
Mahaffy, Greek Pictures.
Gardner, Sculptured Tombs of Hellas.
Tarbell, A History of Greek Art.
Schömann, The Antiquities of Greece.
Murray, Handbook of Greek.
Brooks and Adams, The Long Walls.
Smith, Illustrated History of Rome.
Burn, Ancient Rome.
Parker, Archaeology of Rome.
Forbes, Rambles in Rome.
Anthon, Antiquities of Rome.
Gilman, Story of Rome.
Liddell, History of Rome.
Barnes, History of Rome.
Burn, Rome of To-day.
Adams, Mediæval History.
Dennis, Rome of To-day and Yesterday.
Reber, Ancient Art.
Middleton, Ancient Rome.
Lanciani, Ancient Rome.
Taylor and Cressy, Architectural Antiquities of Rome.
Sturgis, European Architecture.
Strickland, Stories from Ancient History.
Shumway, A Day in Ancient Rome.
Corroyer, Gothic Architecture.
Latimer, France, England, Italy in Nineteenth Century.
Barnes, Brief History of Mediæval and Modern Peoples.
Gilman, Outlines of General History.

- Collier, Great Events of History.
- Judson, Europe in the Nineteenth Century.
- Freeman, Outlines of History.
- Jackson, Ten Centuries of Progress.
- Larned, Chronicles and Castles of Mediæval France.

READING FOR CHILDREN : —

- Plutarch, Boys and Girls.
- Laub, Tales from Shakespeare.
- Miss Yonge, Histories.
- Bulwer Lytton, Rienzi.
- Bulwer Lytton, Last Days of Pompeii.
- Bolton, Lives of Inventors, Artists, Famous Boys and Girls.
- Clodd, Childhood of the World.
- Stories from the Iliad and Odyssey.
- Wallace, Ben Hur.
- Arnold, Sohrab and Rustum.
- Tennyson, The Passing of Arthur.
- Iliad and Odyssey, Bryant's translation (selections).
- Selections from Cicero's Orations, Pliny's Letters.
- Baldwin, Siegfried.
- Baldwin, Roland.
- Longfellow, Miles Standish.
- Haweis, My Musical Memories and My Musical Life.
- Farrington, Tales of King Arthur.
- Tennyson, Idylls of the King.
- Church, Stories from the Greek Tragedians.
- Church, Stories from the Greek Comedians.
- Church, Greek Life and Story.
- Church, Three Greek Children.
- Montgomery, Tales of Ancient Troy.
- Guerber, The Story of the Greeks.
- Guerber, The Story of the Romans.
- Burt, Stories from Plato.
- Macaulay, Lays of Ancient Rome.
- Livy, Hannibal.
- Shakespeare, Julius Caesar.
- Jane Andrews, Ten Boys.

Brooks, Chivalric Days.

Abbot, Cyrus and Alexander.

Pollard, The Bible and its Story.

Henty, Wulf the Saxon.

Morris, Historical Tales.

Ruskin, Ethics of the Dust.

Ebers, Uarda (social customs, Feast of Neith, description of pyramids).

Ebers, Egyptian Princess (selections — interior of temple, interior of palace, etc.).

Palmer, Stories from the Classic Literature of Many Nations.

Butterworth, Zigzag Journeys in the Levant.

Heild, The Land of Temples.

Kipling, Jungle Stories.

Miller, Little People in Asia.

A. L. O. E., Exiles in Babylon.

A. L. O. E., Nebuchadnezzar's Dream.

Byron, Destruction of Sennacherib.

Byron, Vision of Belshazzar.

Badlam, The World and its People.

Clarke, Story of Troy.

Harding, Greek Gods, Heroes, and Men.

Alta Edition, Heroes of the Seven Hills.

Swinton, Studies in English Literature.

Scott, Ivanhoe, Kenilworth.

Collections should be made of pictures of art in its different forms. The central thought of the collection may be art of a people, different periods of development, or the same subject as treated by different peoples.

Grade B 8.

A. ANALYSIS OF CHARACTER.

The wave of vitality becomes higher and stronger here. The desire for a larger self is not easily curbed, but has great possibilities when wisely directed. The desire for power grows into a more enlightened vision

of ways in which effort may be directed. Community life and its channels for the massing of effort and bringing about of results becomes attractive. Desire for leadership, great schemes for righting wrong, or securing public welfare, and glowing patriotism are natural expressions of the high vitality of this period.

B. ETHICAL AIM.

To see what is a larger individual self, and the possibilities of the community, state, or country as the larger self of individuals, with the possibilities to each through coöperation, is the principal aim in this grade. The children should be led to see what great leadership has meant in the way of character, how great results are secured, how the higher life of the community, state, and country depends upon the higher life of the individuals constituting it.

C. GENERAL STATEMENT OF MATERIAL.

A detailed study of United States history is now begun that the children may see how coöperation as the fundamental principle of social life has worked itself out in the development of our own nation. Through this study the child comes to see where we, as a nation, stand: our necessary evils and suffering in the past, the good that has come out of them for us, our present strength and weakness, and what the individual can do to promote our national growth in directions of real progress. The fundamental ideas of law and good government are traced through the development of community life, beginning with the coöperation of the isolated family, and following its growth into more highly differentiated coöperation of the neighborhood,

the town, and the city. The outlines of city, state, and national government are now studied in the light of their historical development and their underlying principles.

The following outline will be found helpful at this point: —

THE GROWTH OF FREEDOM.

Great events in English history showing the progress of the spirit of freedom. Condition of Europe leading to the discovery of America. Nationalities represented in the colonization of America, and the ideals of institutional life transplanted through them. Beginning of assimilation and desire for political freedom as an outgrowth of the French and Indian War. The form of freedom gained through the Revolutionary War. A working basis for political freedom in the adoption of the Constitution. Difference in ideals of freedom and national progress cause formation of different parties, but because there is a desire for progress there is growth. Extension of territory and material prosperity develop the commercial spirit. In the collision between the ideals of coöperation and competition (the Civil War), coöperation wins and translates itself as a desire for extension of freedom to all classes. The ideal of universal freedom and coöperation — brotherhood, an organic nation — struggles with lower standards. The realization of the ideal in isolated cases and the persistence of the idea in literature seem to be slowly leavening the nation.

The state is here regarded as an extension or completion of the individual; justice, the return of the deed upon the doer, as resulting from this interrelation of the individual with the structure of society; and the general government in its preservation and promotion of interests as a manifestation of the general intelligence of all. The study of Dante's *Divine Comedy* is used for the language and literature work, with a view to impressing this conception of justice.¹ Selections from the story are made at the discretion

¹ It is not intended that an exhaustive study of the *Divine Comedy* shall be undertaken; the teacher is to use the parts that seem to be most appropriate as "ethical material."

of the teacher, but the idea of punishment as an outgrowth of evil-doing is to be emphasized throughout. Law is defined as a means for regulating the coöperation of members of the social community to secure the highest good of the whole. Obedience to law is thus rendered intelligent, and patriotism becomes a matter of thought as well as of feeling. The patriotic idea should be strengthened in every way possible by the reading of speeches, poems, etc., on great national subjects.

The teacher should give the children a general idea of the ideal republics of Plato, More, and others, and then lead them to form and express their own ideal of what ours should be.

The following outline may be used as a guide in planning this part of the work:—

A. Language.

I. KING ARTHUR.

Tales from King Arthur are used in connection with the study of the Saxon Period in the history work. They also furnish concrete examples to illustrate the character study in the work in Dante.

II. DIVINE COMEDY.

1. The Inferno.
2. The Purgatorio.
1. The Inferno.

(a) Introduction:—

1. Dante lost in the wood.
2. Encounter with wild animals.
3. Meeting with Virgil.
4. Entrance to Inferno.

(b) Wrong-doing resulting from weakness of will.

1. Outer Court. Negative Characters.
2. Limbo. Virtuous Unbelievers.
3. Circle II. The Impure.
4. Circle III. The Intemperate.
5. Circle IV. Money Sinners: the Avaricious and the Prodigal.

6. Circle V. The Angry and the Sullen.

7. Circle VI. The City of Dis.

(c) Wrong-doing resulting from malice against (1) one's neighbor, (2) one's self.

Circle VII. 1. Murderers.

2. Suicides.

Consider what sins of weak wills might lead to sins of hatred of neighbor or of self.

(d) Wrong-doing through fraud.

Circle VIII. 1. Political Barterers.

2. Hypocrites.

3. Thieves.

4. Gossips, Slanderers.

5. Liars.

Circle IX. 6. Treachery (the result of pride or envy).

7. Exit from Inferno.

2. The Purgatorio.

(a) Introduction :—

1. Cleansing from stains of Inferno.

2. Three steps of

(1) Consciousness of wrong.

(2) Repentance and struggle to overcome.

(3) Effort to live by the law of love.

(b) Terraces :—

In each terrace note (1) picture representing condition of wrongdoer, (2) ideal, (3) warning, (4) effort to overcome.

Love distorted.	{	1. Pride.
		2. Envy.
		3. Anger.

Love defective.	{	4. Sloth, Indifference.

Love excessive.	{	5. Avarice.
		6. Intemperance.
		7. Impurity.

B. Government

- I. The Isolated Family.
- II. The Rural Group.
- III. The Village.
- IV. The City.
- V. Higher Life of Cities.
 - (a) What constitutes good citizenship.
 - (b) What does higher life mean.
 - (c) Higher life of Chicago, Boston, New York.

If time permits, higher life of St. Louis, New Orleans, Philadelphia.

Special study of social settlements.
 - (d) Higher life of our own city.
- VI. The State.

Our own State.

1. NATURE-STUDY.

Electricity and magnetism. Natural magnetism; poles of the earth; discovery of magnetism. Artificial magnets; marine compass; polarity; action between magnets; induced magnetism; physical theory of magnetism; magnetic field; terrestrial magnetism. Electricity: sources, conductors, uses, effects.

2. MEASURE.

Coöperation in our own country or with foreign nations, depending upon the good faith of the government and integrity between nations, should be considered here.

Interest, partial payments, bank discount, exchange, ratio, proportion, and partnership are taken in considering coöperation of individuals in the rural group,

village and city; stocks and bonds, taxes, and duties in the study of city and state.

Grade A 8.

A. ANALYSIS OF CHARACTER.

This is a period of great sensitiveness to and desire for the ideal, of longing for self-knowledge, of speculation concerning the future, and of desire for equipment for life. This grade is sometimes designated as the beginning of the sentimental period. The ordinary meaning of that expression could be applied to some children before this age, but here it is generally more evident. It is the usual channel through which this desire for the ideal is expressed. Much depends upon the environment and the guidance of children at this age.

B. ETHICAL AIM.

Perhaps there is no more critical period in child life than this, the period of adolescence. The change taking place in the child's physical nature is accompanied by a development of sex instincts, not only mysterious to the child, but positively dangerous to his whole future life, unless at this time he is wisely guided. The teacher should see (since the average home cannot be relied upon to do this) that these natural instincts are turned into healthful channels rather than allowed to become morbidly perverted or hopelessly shallowed. Many of the pupils in this grade do not enter the high school, so that whatever is done in this direction must be done here. The ignoring in school and the vulgarizing outside of the instincts dominant at this period

have resulted, commonly, both in sentimentality and impurity. It is time that the negative policy within the school be abandoned and some positive ideals developed. To define marriage or home-life as the highest spiritual coöperation will emphasize its organic connection with all life, whose fundamental principle we have found to be coöperation. Such a conception will perhaps serve to clarify somewhat the murky sentimentalism which surrounds the subject in the adolescent mind, not however robbing it of any sacredness, but rather enriching its meaning. In the hands of a tactful and pure-minded teacher, this work may be made infinitely valuable.

C. GENERAL STATEMENT OF MATERIAL.

The detailed study of United States history is continued and concluded in this grade, according to the plan sketched in the preceding half-year. But the institution for special study is here the home instead of the state. The home is studied as to its fundamental idea, its environment and structure, its furnishings, the industries necessary for maintaining its material side, and the art essential that it may perform its higher usefulness.

Margaret Morley's *Song of Life* and *Life and Love* contain the best possible presentation of the scientific material for this work. The teacher should by all means make herself familiar with these books.

Love stories, carefully selected, should be read in connection with the work of the grade, these always to be the best of their kind that the teacher knows, and inculcating pure and rational rather than sentimental and passionate ideas of love. The teacher may test such stories as she thinks might be suitable to the purpose,

by the following definition given by Dr. Mary Wood-Allen for immoral literature: "Immoral literature is any literature which depicts love as a feverish, irresponsible passion, that comes we know not whence, and carries us we know not whither, but that must be followed wherever it leads." Any story which this definition describes should be at once ruled out.

The following outline may be used in planning the work for this grade:—

A. Language.

1.

The Paradiso. (For ideals and to complete work begun in B 8.)

HEAVENS:—

1. Moon. Right Motives but Imperfect Wills.
 - (a) The individual is part of the whole.
 - (b) Man's greatest endowment is Freedom of Will.
2. Mercury. Fame the incentive to great deeds. If man has Freedom of Will, desire measures attainment.
3. Venus. Love of friends the incentive to good living. Love should mean good will to men; should include the whole "spectrum" of virtues:—
 - (a) Patience.
 - (b) Kindness.
 - (c) Generosity.
 - (d) Humility.
 - (e) Courtesy.
 - (f) Unselfishness.
 - (g) Good Temper.
 - (h) Guilelessness.
 - (i) Sincerity.
4. The Sun. Spiritual Teachers. Everything created is a thought of God. Man is the highest expression of God's thought. Man's life, then, should express beauty, harmony, love.
5. Mars. Brave Thinkers. Martyrs. Crusaders. Crusades of to-day.

6. Jupiter. Just and Merciful Rulers. The whole for the Individual. What is secured to the individual by each of the institutions: Family, School, Society, State, Church.
7. Saturn. Devout Thinkers, who saw deep meanings in life and gave to the world the results of their thinking.
8. Fixed Stars. Perfection. Dante comes to perfect understanding of the meaning of each stage of his journey. Love and justice reign over all the affairs of life.
9. Final Heavens. God the Source of Life and Light. God is Love. Man is created to be like God. Man therefore must give out love.

II.

Suggested Stories.

1. Tennyson's Princess.
2. Shakespeare's Tempest.
3. King Lear.
4. As You Like It.
5. Browning's Hervé Riel.

III.

The "Song of Life."

The story of life.

- (a) Plant.
- (b) Fish.
- (c) Bird.
- (d) Higher Animal.
- (e) Man.

Ideals of manhood and womanhood.

Readings and talks on the following:—

Longfellow, Maidenhood.

Lowell, Irené.

Lowell, My Love.

Browning, E. B., My Kate.

Tennyson, Sir Galahad.

Tennyson, King Arthur.

Tennyson, Washington and Lincoln.

1. NATURE-STUDY.

The Home.

Material: stone, brick, wood. Ventilation: study of air, study of flame, respiration. Heating: study of coal, natural gas, electricity, hot air, hot water. Lighting: kinds of lights, location, fixtures. Sanitation: pressure of air, compressibility, elasticity. Pumps: lifting and force pumps, waterworks. Food: quality, quantity.

2. MEASURE.

The work in measure consists in the study of measurements of surfaces and solids, and a continuation or review of the work outlined for the grades below.

History for this grade is indicated in B 8. In this grade the work in civil government is not separated from the history, but finds its cause, explanation, and application through that study.

The following references are for this grade and the preceding:—
READING FOR THE CHILDREN:—

Great orations relating to state life, as of Demosthenes, Cicero, Webster.

Washington's Farewell Address.

Lincoln's Gettysburg Speech.

Hale, *The Man without a Country*.

Fiske, *The Last American*.

Fiske, *Discovery of America*.

Fiske, *American Revolution*.

Fiske, *Beginnings of New England*.

Fiske, *Critical Period of American History*.

Coffin, *The Story of Liberty*.

Coffin, *Old Times in the Colonies*.

Coffin, *Building of the Nation*.

- Coffin, Redeeming the Republic.
- Austin, Standish of Standish.
- Farrington, Tales of King Arthur.
- Tennyson, Sir Galahad.
- Tennyson, The Holy Grail.
- Tennyson, Passing of Arthur.
- Tennyson, Song of King Arthur's Knights.

REFERENCE BOOKS:—

- MacClure's, Life of Lincoln.
- Judson, The Growth of the American Nation.
- Wright, Industrial Evolution in the United States.
- Armitage, Childhood of the English Nation.
- Irving, Life of Washington.
- Irving, Life of Columbus.
- MacMaster, History of the United States.
- Brooks, The Century Book.
- Griffis, Romance of Discovery.
- Doyle, English Colonies.
- Fiske, Virginia and her Neighbors.
- Cooke, Stories of the Old Dominion.
- Goodwin, At the Head of a Hundred White Aprons.
- Griffis, The Pilgrims in Their Three Homes.
- Hart, History as told by Contemporaries, Vol. I.
- Austin, Standish of Standish.
- Austin, Betty Alden.
- Austin, A Nameless Nobleman.
- Austin, Dr. Le Barron and his Daughter.
- Longfellow, Courtship of Miles Standish.
- Hinam, The Landing of the Pilgrims.
- Motley, Rise of the Dutch Republic.
- Griffis, Romance of Colonization.
- Irving, Knickerbocker's History of New York.
- Mitchell, Hugh Wynne.
- Shaler, Man in North America.
- Bruce, Economic History of Virginia.
- Parkman, Pioneers of France in the New World.
- Scudder, George Washington.
- Longfellow, Evangeline.

- Lecky, England in the Eighteenth Century, Vol. III.
 Frothingham, Rise of the Republic.
 Fiske, War for Independence.
 Hale, George Washington.
 Harrison, A Son of the Old Dominion.
 Cooper, The Spy.
 Holmes, Grandmother's Story of Bunker Hill.
 Curtis, Constitutional History.
 Hamilton, History of the Republic, Vol. III.
 Lodge, Life of Washington, Vol. II.
 Hart, Formation of the Union, Vol. II. of the Epoch Series.
 Longfellow, Building of the Ship.
 Curtis, United States and Foreign Powers.
 Channing, Student's History of United States.
 De Tocqueville's Visit to America, 1831, the *Century*, September,
 1898.
 Sumner, Jackson.
 Lodge, Webster.
 Von Holst, Calhoun.
 Schurz, Clay.
 Nicholay and Hay, Life of Lincoln.
 Lincoln's Gettysburg Speech.
 Lincoln's Second Inaugural Address.
 Brooks, Phillips, Address upon the Life and Death of Lincoln.
 Lowell, Commemoration Ode.
 Holmes, Brother Jonathan's Lament for Sister Caroline.
 Whittier, Kansas Emigrant.
 Whittier, John Brown of Ossawatimie.
 Whittier, La Maria's Du Cygne.
 Stowe, Uncle Tom's Cabin.
 Tourgee, A Fool's Errand.
 Page, Red Rock.
 Wilson, Division and Reunion.
 McCulloch, Men and Measures of Half a Century.
 Grady, The New South.
 Lowell, The Blue and the Gray.
 Sidney Lanier, Symphony.
 Henderson, The Social Spirit in America.

Government.

Bryce, American Commonwealth.

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Death mask — two views.

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A. Maignan, Dante and Matilda.

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House of Dante, Florence.

Monument to Dante in Santa Croce, Florence.

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M. Rieder, Dante and the Friends of Beatrice.

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Other pictures for this grade should be of the children's own choosing. Each child should have made his collections through the grades below and classified them in the grade just below.

SONGS :—

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Norris, Homer, Sweet and Low.

APPENDIX A.

BOOKS OF REFERENCE.

For convenience of reference some of the more important works mentioned in the preceding pages are here included in one list, together with information regarding the time and place of publication, the publisher, and the price.

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APPENDIX B.

FUNDAMENTAL PRINCIPLES.

WHAT we do as teachers depends upon how we regard the child, what we know of his nature, and — if we believe that the end of education is self-realization — what we regard as his destiny.

The child's destiny must be determined by his latent possibilities. We can know these as we can know the possibilities of any existence, only by knowing his nature, and the child's activity is the only means we have of interpreting the latter. In studying his nature it is only gradually that we come to discover laws underlying his activity. It is true that what the child does shows what he cares for (*i.e.* his interests), and we have not far to seek for the surface interest of the miniature soldier band whose rhythmical drum-taps are heard down the street, nor for the interest of the little girls playing "house" in the corner of the yard; but we can never know the full meaning of the child's activities till, through our response, we bring about greater freedom and definiteness in them by supplying the conditions for their complete development.

By finding the child's interests, acting upon his initiative, and satisfying his desires, we find the child's possibilities. This, then, is the fundamental thing in education — to find the child's interests. The child himself may not be conscious of the meaning of his interests, and usually we are not till, by some happy chance or long observant study of individuals and of the activities and interests of the race, we find the clew. Thus the meaningless scribble of the young child, when there is adequate response, grows into more and more definite representation by drawing, and finally attains to artistic creation. Working at first blindly, he gradually awakens within himself the power to make a definite line mean a definite thing, and finally, through artistic creation, to make it mean a universal thing perceived and enjoyed by all.¹

¹ Baldwin, *Mental Development*, Chap. V, Tracery Imitation. Sully, *Studies of Childhood*, Chap. X, The Young Draughtsman. Lukens, *Pedagogical Seminary*, October, 1896, A Study of Children's Drawings. Barnes, *Studies in Education*.

In like manner the first efforts at locomotion may grow into the graceful rhythmic movements of the dance, the babbling of the infant into the most eloquent oratory. Nature gives the child the start, but the highest results can be attained only by a mediator or teacher who knows the end from the beginning. At first nature does for the child what we as teachers would like to do later — holds him spellbound to the activity helpful to him. We try to secure unity of activity, but it is not till we learn to utilize his natural powers that we can secure the action of the child as a unit. The little two-year-old is content to repeat an action by the hour — a pathetic appeal for a response which is usually met by spoons or buttons. What a barren field upon which to waste so much vital power!

When the child enters school or kindergarten at five years of age, the dominant interest may be expressed as sense hunger, a desire to see, hear, touch, smell, and taste. Adequate response through environment and training makes life a delight from the feast that is constantly spread before him. Lack of response dims his vision so that he fails to see that any feast is there.¹

We have to deal with a developing organism. As the child grows, the vital principle, the tendency to self-expression, manifests itself through spontaneous activity of different kinds depending upon the development of different parts of the organism at different periods. The maturing of the various parts of the body brings about the activities which are necessary for complete development. The effort of the organism to develop in the way indicated is manifested by certain desires or interests shown by particular modes of instinctive or functional activity.²

The progressive order of instinctive activities determines the progressive order of interests. Whether the organism develops properly or not, depends upon whether the response or nourishment furnished is appropriate to the particular need of the hour. Thus, when the senses are developing, the craving for exercise of them (the desire to see, hear, touch everything) shows the particular part of the organism that is growing, and indicates that exercise, response, and nourishment

¹ Halleck, *Education of the Central Nervous System*, Chap. VII. Froebel, *Causes and Consequences*.

² Baldwin, *Story of the Mind*, Chap. III. James, *Psychology*, Instincts. Oppenheim, *The Development of the Child*, Facts in Comparative Development. Donaldson, *Growth of the Brain*; *The Education of the Nervous System*.

are demanded for complete development. It is evident that the satisfaction of the child's craving means development; starving means stunted growth.

These interests are not permanent, but rise, culminate, and decline. It is evident, then, that the only way to secure complete, symmetrical development, is to satisfy the interests as they appear. As it would be of no use to try to feed the pupa in the cocoon with the leaves it should have had as a caterpillar, so the highest powers of the child to observe (use his senses) cannot be developed after the plastic, developing period is past. The highest development, however, does not mean exclusive development in one direction, the crystallization of activity by habit, for that would mean arrest of development.¹ Thus too emphatic observation of color would lead to the exclusion of observation, of form, or of the object as a whole. Over development or lack of nourishment might obscure the general application of the law of order.

Properly developed, such instinctive activity as has been indicated above furnishes the necessary basis for further development and grows naturally into it. The sense hunger just described grows into a desire to possess, which gives greater definiteness of impression and brings about more complete adaptation of the organism.² The physical development, through action of the organism upon environment, brings about certain reactions in the way of ideas, till finally there results self-consciousness of the meaning of the instinctive activity.³

Thus the child gradually constructs his world. It is an inner world, at first vague, undifferentiated, then gradually merging from the mists into definiteness. How closely it corresponds to the outer world we cannot discover as easily as we should like, since at first the impressions constituting the inner life are inadequately expressed. Some shock of discovery, as in the case of the child who made dots for "the loved spots which my infancy knew,"⁴ discloses the lack which our wider experience has filled out. Much of our quibbling over courses of study is the result of a blind effort to make the child construct mentally his whole environment. So-called instruction on our part may

¹ James, *Psychology*, Instinct (inhibition of instinct by habit). Baldwin, *Story of the Mind*, Chap. IV, p. 77.

² Oppenheim, *The Development of the Child*, Facts in Comparative Development, p. 61.

³ James, *Psychology*, Instincts, p. 390. Lloyd, *Psychological Review*, Stages of Knowledge, pp. 167-177. Dewey, *Educational Creed*.

⁴ *A Study of Children's Drawings*.

mean very little to the child. He takes only what his craving demands. If we meet his interests, well and good; if not, the time spent is wasted, both for him and for us.

All ideas serve as a basis for new ideas and give them color, "the impulse to self-expression differentiating and organizing them." The thought environment into which the new idea is introduced, finding its identity or relations and differences, makes a new whole of experience from which further action proceeds. This new whole, when organic, projects a new self as a possibility, which acts as a moving cause to the realization of the projected self, the strength of the impulse to action being determined by the clearness of the projected image. The clearness of the image and consequently effective action come from increased nutrition; and this last is secured through exercise.

Without organization the impulse to action is weak, the lack of a projected image, or indistinctness of image, acting as a negative force, or inducing a passive condition that hinders self-activity and development. Lack of response or of nourishment brings about a passive condition and checks self-expression. The clogging of activity brings suffering—a too intense strain to organize new with old. The individual attempts to translate his environment to himself in organic relation to himself. He cannot adjust or organize when links are broken and gaps prevail.

For the construction of an inner organic world, one which will enable him to live in organic relations with the outer world, the child's dominant interests must be noted, and as they appear they must be satisfied.¹ Further, they must not only be satisfied but also organized, and this means a wide experience of his environment, wide enough to determine their most fundamental relations. To be sure, life to the child is a unit; he does not classify his experiences according to fundamental relations; but it is necessary that one who would help him to make organic adjustments to life should look down upon his childish experiences from the height of a larger contact with life, should see what fundamental relations are involved, what he must be made aware of according to his capacity to understand, and then aid him to generalize for himself these fundamental relations.

The extent to which a child will adjust himself in an organic way to his environment will depend upon how the environment is mediated through the interpreter or teacher, who understands the cravings of

¹ Dewey, *Educational Creed*, Interest, p. 226.

the child, the response the environment can furnish, and the proper method of bringing the two together to the greatest advantage of the child. When the child says "Why?" and "What for?" the mediator must see back of the question the direction of the child's interest. He must see what part of the child's environment furnishes the answer, and how this must be simplified if it is to be interpreted rightly. This means that the ever widening interests of the child must be satisfied by the course of study, and that the child's complete comprehension and organization of the material included in this course of study must be secured through an adequate method of teaching.

One who works with children soon finds that he can work successfully only by learning to use the methods and devices which make things intelligible to the child mind. But these may not be learned once for all; the way of approaching the five-year-old is not necessarily the way to approach the child of twelve. We gradually come to the generalization that with children we must do as the children do when they follow their own method of gaining ideas. Experience has shown that the side usually neglected is the motor side. We can learn what a child thinks only by what he does. We can know when our work has been effective only by the way in which the child expresses himself upon the subject we have been teaching. It follows that if we can know what a child thinks only by what he does, we must find different and appropriate modes of expression for different kinds of ideas. In portraying the structure of North America, for instance, expression in language would be a long process and a great waste of time compared with a chalk-modelled map. To describe the shades and tints of a robin or the coloring of some Egyptian ornament would be futile were a good picture at hand. Making, telling, modelling, painting, drawing, writing, gesturing, acting, and other forms of expression are each serviceable at times according to the idea to be expressed. And if these forms of expression are useful in conveying ideas to others, they are of even greater value to the one who uses them in making what he thinks clear to himself.

Since the child cannot comprehend the ethical standard of the adult, but is dependent upon his stage of insight, since attention to motor images necessarily causes action in accordance with those images, and since the drawing power to action becomes greater as the motor image grows clear and more definite, it follows that the final test of the value of the teacher's work will be found in what may be called expression. And this on the moral side includes the child's attitude toward his environment, his harmony with nature and institutional life, his

coöperation, and, above all, his self-direction, which, acting in organic relations from an impulse that is within and not because of compulsion from without, shapes his conduct in accordance with right principles.

APPENDIX C.

THE SEQUENCE-METHOD IN ITS BROADER APPLICATION.

THERE are certain principles which determine the method of using any course of study. These principles are none other than those which form the basis for the sequence-method. Taking any course of study and applying to it the principles of the sequence-method, we may so systematize the work as to secure the highest degree of organization of the child's interests, and secure it in the most economic way.

Applying the principle of unity, we shall be led to conclude that from first to last the sole purpose of any course of study is to further self-realization in the child, to help him to find his highest possibilities, and so to develop those possibilities that they will be brought to realization or use. Completeness demands that the whole child, the organism, which in itself cannot be divided, but which for convenience we may regard from different standpoints as having a physical, an intellectual, a moral, an æsthetic, and a religious nature, be developed to the utmost. Dormant faculties must be brought to light and put to effective use. The child must be brought into contact with his whole environment, natural, institutional, and idealistic, and the best means be used to secure expression as well as impression. It may be remarked in this connection that the three R's will hardly suffice from the standpoint of completeness, since in themselves they are only a means to an end and depend upon their content for their vitality.

The use of the principle of selection requires that such units of material be selected as will most clearly and economically disclose to the child his own possibilities and his organic relations. Since our whole inheritance of civilization or race experience cannot be used, this principle demands that the field be covered in great strides, pause being made only at places where the experiences of the race have been so vital that landmarks have been left to tell of its achievements. Such stopping-places will include the social institutions that have crystal-

lized into permanency, such as the family and the school, social life, industrial life, the State, and the Church. They will also include the achievements of science, as ministering to man's physical and spiritual needs, and the successive ideals of the race embodied in the arts.

Following the principle of proportion, it would be necessary so to relate essentials that the organic significance would be disclosed. While nothing is really isolated, anything may appear so till we see its relations. These we may see in increasing definiteness as we pass from the ideal or potential to the real, comparing it for greater clearness, and applying to it the standards which, through the use of number and form, give us definiteness.

Finally, progressive order would show to the teacher when to use the material. This does not mean observing nothing but the logical unfolding of a subject or a systematic presentation of topics. The order is determined by the child, through what we can discover of the order of his development, as, for example, by learning what to him is near or remote, how he acquires new experience, etc. This principle should also determine the order of work for the day, by taking into account the periods of highest vitality and those of fatigue.

